

Advanced configuration and custom reporting in Google Analytics 4

James Akers, Wednesday 21 June 2023





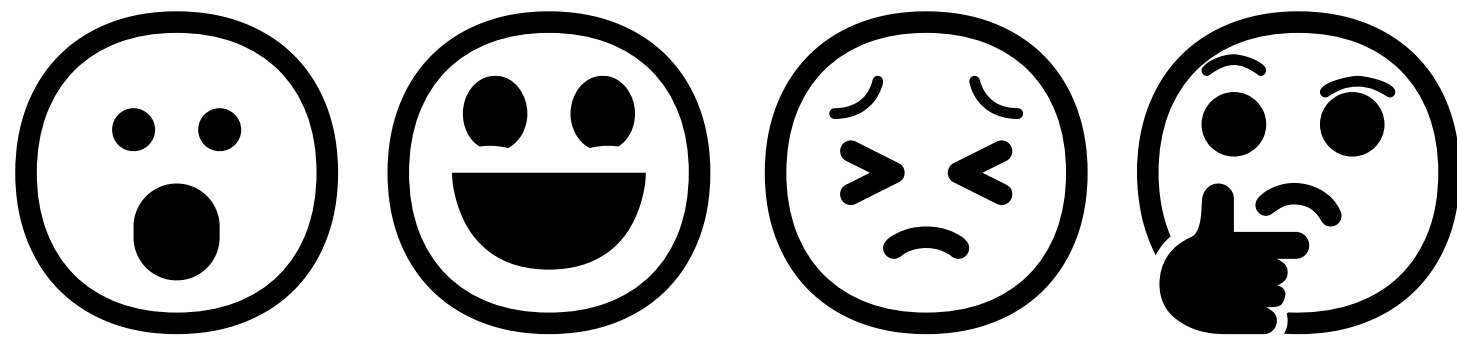
#DigitalCultureNetwork

@ace_dcn

Session outline

Today we will cover:

1. Navigating the reporting interface
2. Building custom reports
3. Events, Parameters and Conversions
4. Configuring GA4 to match your objectives





Analytics Debugger

『デバッガ』

Your **Single Source of Truth** (SSOT)
for debugging analytics implementations

START DEBUGGING

v2.3.4

LATEST NEWS

- [How to track AMP Pages with Google Analytics 4](#)
- [Universal Analytics Migration Library – Custom task](#)
- [Google Tag Manager: Google Analytics 4 \[GA4\] Events Setup with a single Tag](#)
- [Google Analytics 4 Measurement Protocol CheatSheet](#)
- [HTML Media Elements Tracking Library](#)



Google Analytics 4 (GA4) - Dimensions and Metrics Cheatsheet v1.2

All DataDimensionsMetricsExpandFeedback

Attribution

Campaign ID	DIMENSION	
Is manual campaign	DIMENSION	
Campaign	DIMENSION	
CM360 account ID	DIMENSION	
CM360 account name	DIMENSION	
CM360 advertiser ID	DIMENSION	
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CM360 creative format	DIMENSION	
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CM360 creative version	DIMENSION	
CM360 default channel group	DIMENSION	

Ecommerce

Currency	DIMENSION	
Item affiliation	DIMENSION	
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Item ID	DIMENSION	
Item location ID	DIMENSION	
Item name	DIMENSION	
Item variant	DIMENSION	
Item list ID	DIMENSION	

Cohort

Cohort	DIMENSION	
Daily cohort	DIMENSION	
Monthly cohort	DIMENSION	
Weekly cohort	DIMENSION	
Cohort active users	METRIC	
Cohort total users	METRIC	

General

A/B testing experiment event	DIMENSION	
Experiment - variant name	DIMENSION	
Experiment - variant ID	DIMENSION	
Experience - variant ID	DIMENSION	
Experiment impression ID	DIMENSION	
File extension	DIMENSION	

Demographics

Age	DIMENSION	
Interests	DIMENSION	
Interest IDs	DIMENSION	
Gender	DIMENSION	
In-market interest ID	DIMENSION	

Geography

City	DIMENSION	
City ID	DIMENSION	
Continent ID	DIMENSION	
Continent	DIMENSION	
Country	DIMENSION	
Country ID	DIMENSION	
Latitude	DIMENSION	

Part 1:
**Navigating the GA4
reporting interface**





Home

Reports

Explore

Advertising

Admin





Overview and Detail reports

Explorations for deeper analysis

Configuration and integration options

[← Back](#)

 Property creation

 Business details

3
Business objectives

4
Data collection

Choose your business objectives

For reports that are personalized to your business, select the topics most important to you.



Generate leads

Analyze visitor metrics and attract new customers



Drive online sales

Analyze purchase behavior and get more sales



Raise brand awareness

Spread the word about your business



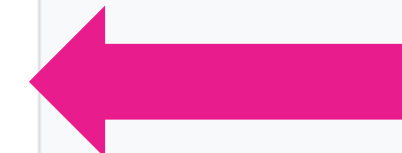
Examine user behavior

Learn how people use your site or app



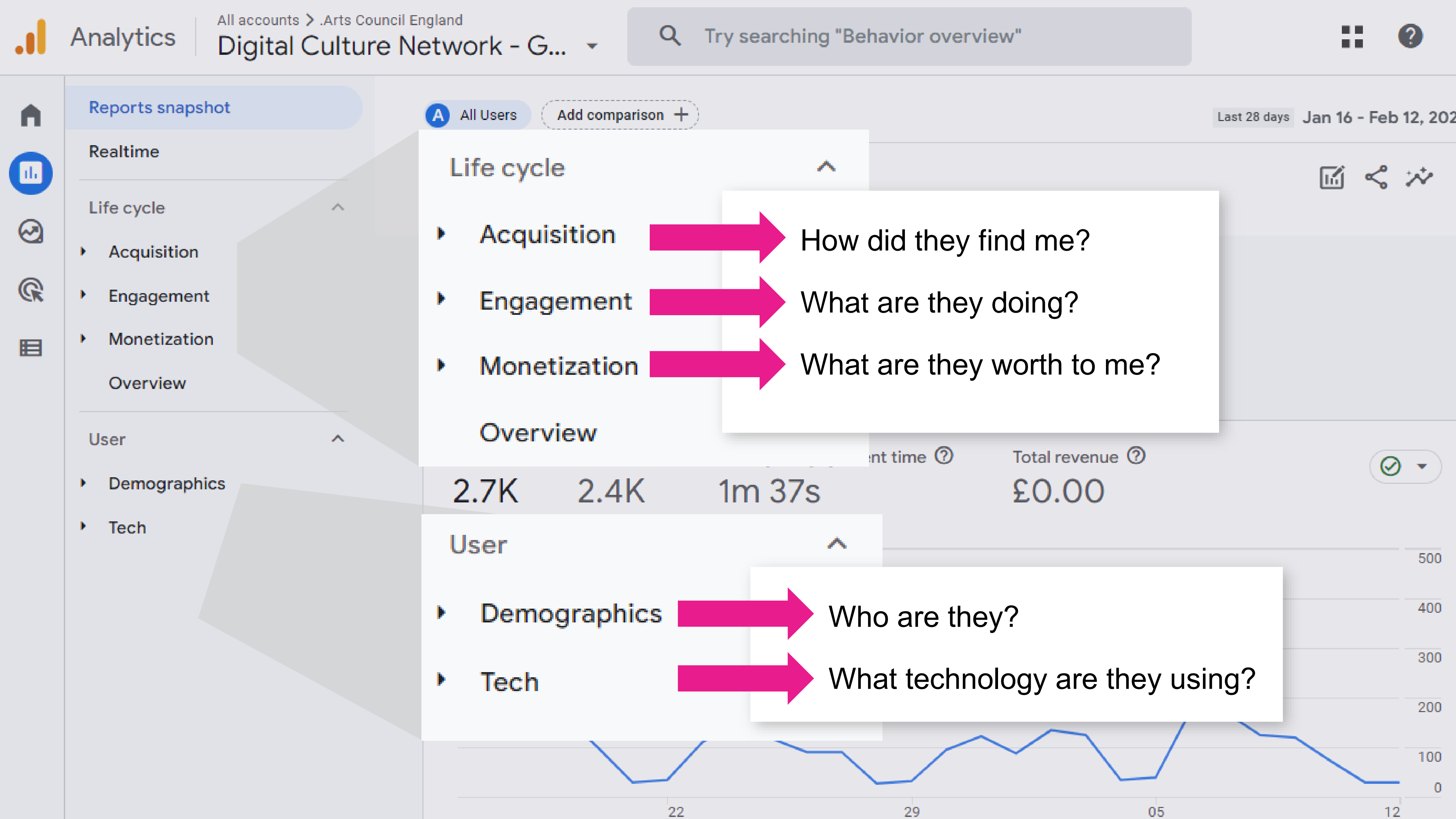
Get baseline reports

Multiple types of reports (this option can't be combined with other options)



[Back](#)

Create



Reports snapshot

All Users Add comparison +

Last 28 days Jan 16 - Feb 12, 202

Realtime

Life cycle ^

- Acquisition
- Engagement
- Monetization

Life cycle ^

- ▶ Acquisition → How did they find me?
- ▶ Engagement → What are they doing?
- ▶ Monetization → What are they worth to me?

User ^

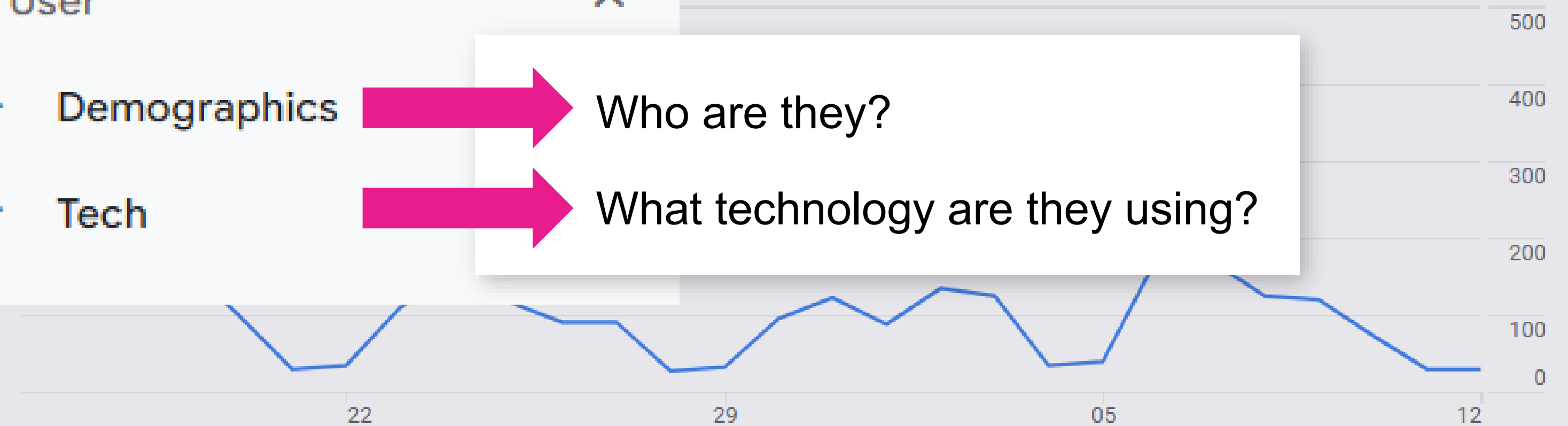
- Demographics
- Tech

Overview

2.7K 2.4K 1m 37s Total revenue £0.00

User ^

- ▶ Demographics → Who are they?
- ▶ Tech → What technology are they using?



Event

A specific interaction with your website.

Users

The total number of active users.

Engaged sessions

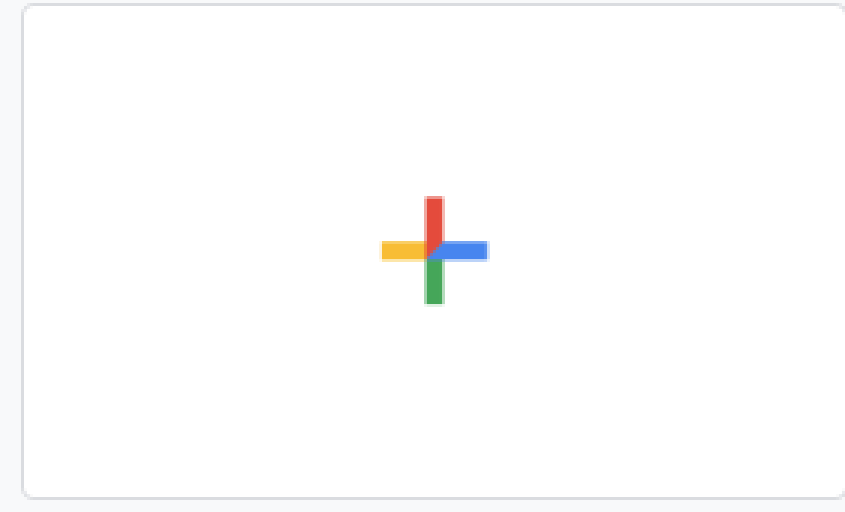
The number of sessions that lasted
longer than 10 seconds,
or had a **conversion event,**
or had or had **2 or more page views.**



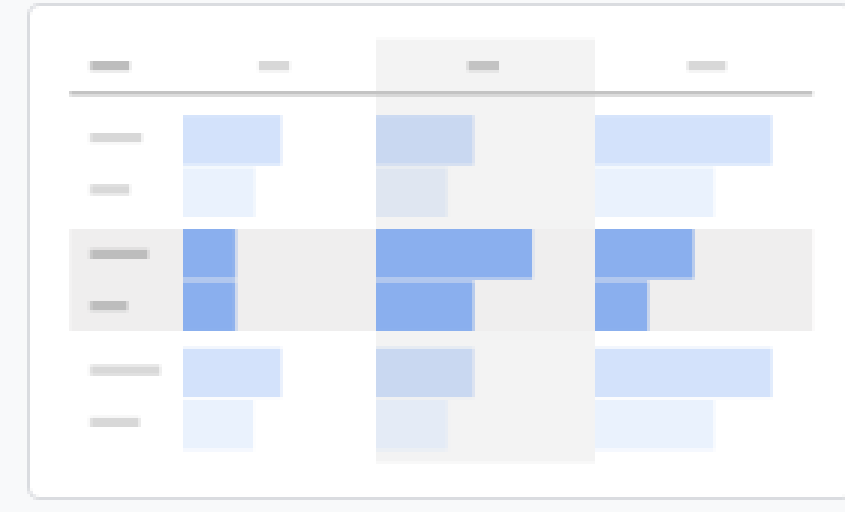
Explorations

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?



Type	Name ↓	Owner	Last modified ↓	Property	Search
	File Downloads	Digital Culture Network	Feb 2, 2023	Digital Culture Network - Google ...	⋮
	Funnel	Digital Culture Network	Jan 24, 2023	Digital Culture Network - Google ...	⋮
	YouTube Plays	Digital Culture Network	Dec 7, 2022	Digital Culture Network - Google ...	⋮
	Path exploration	Digital Culture Network	Aug 17, 2022	Digital Culture Network - Google ...	⋮

Part 2: Building custom reports



Option 1:

GA4 Reports

Useful marketing reports

- Acquisition: Referral
- Acquisition: Email campaign

Option 2:

GA4 Explorations

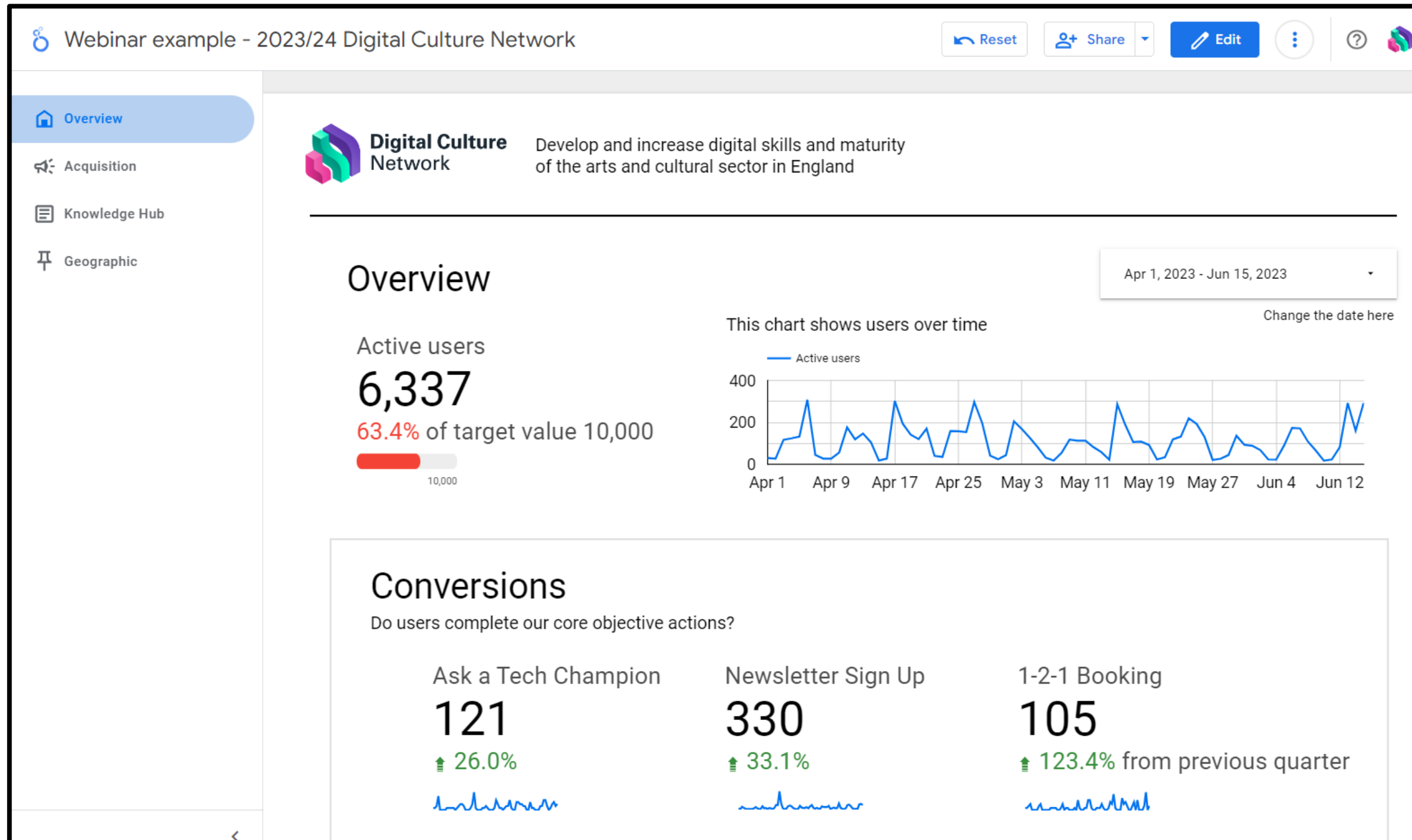
Dive deeper into engagement data

- File downloads
- Site search

Option 3:

Google Looker Studio

Fully customisable data visualisation



Custom Reports

When building reports consider:

- Who is the audience?
- How often will it be accessed?
- What level of detail is needed?

What functionality do you need?

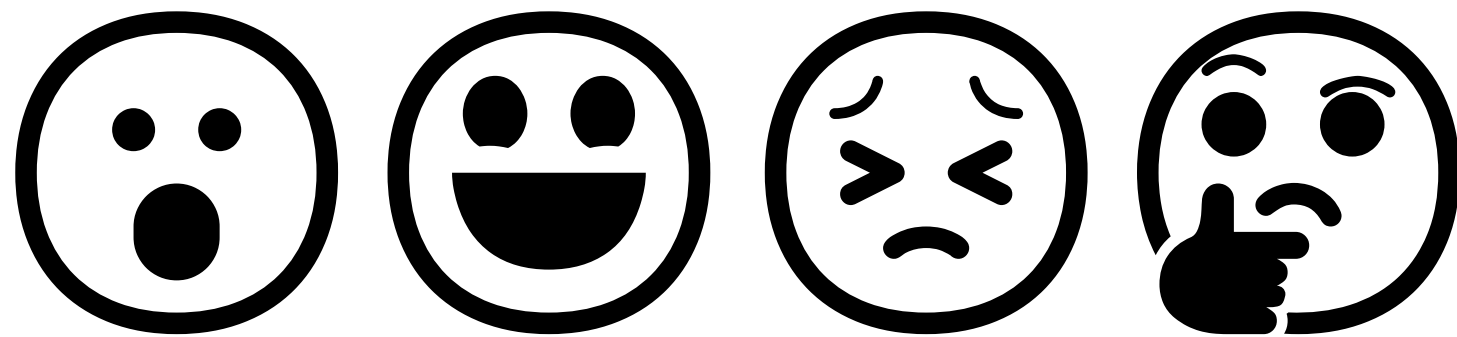
	Maps	Funnels	Commentary	Share with others	Scheduled email
GA4 Reports		✓		✓*	
GA4 Explorations		✓		✓*	
Looker Studio	✓		✓	✓	✓

* limited access control

Session outline

Today we will cover:

- ~~1. Navigating the reporting interface~~
- ~~2. Building custom reports~~
3. Events, Parameters and Conversions
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Part 3:
**Events, Parameters
and Conversions**



Event

A specific interaction with your website

Parameter

Additional information about an Event that is sent along with the Event

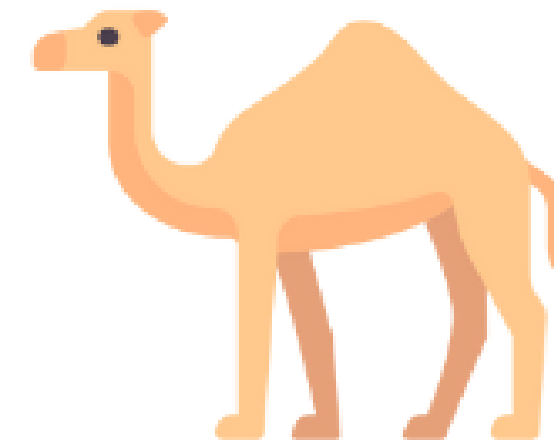
Conversion

Any user action that is valuable to you

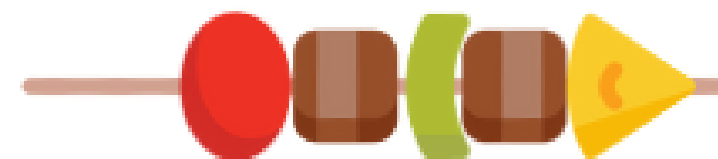
Events power GA4

Standard events:

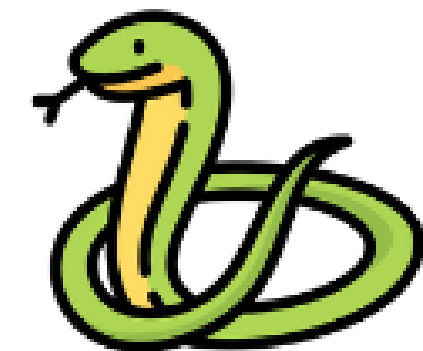
- first_visit
- page_view
- session_start
- user_engagement



camelCase



kebab-case



snake_case

Enhanced Measurement

Events for additional actions:

- click
- file_download
- form_start, form submit
- scroll
- view_search_results
- video_start, video_progress, video_complete

Data collection is active in the past 48 hours.

Stream details

STREAM NAME digitalculturenetwork.org.uk STREAM URL https://digitalculturenet

MEASUREMENT ID G-RZF2R7PBE4

Events

Enhanced measurement

Automatically measure interactions and content on your sites in addition to standard page Data from on-page elements such as links and embedded videos may be collected with rele personally-identifiable information will be sent to Google. Learn more

Measuring: Page views Scrolls Outbound clicks + 3 more

Modify events Modify incoming events and parameters. Learn more

Create custom events Create new events from existing events. Learn more

Save

Page views

Capture a page view event each time a page loads or the website changes the browser history state. Optionally turn off browser history-based events under advanced settings.

Show advanced settings

Scrolls

Capture scroll events each time a visitor gets to the bottom of a page.

Outbound clicks

Capture an outbound click event each time a visitor clicks a link that leads them away from your domain(s). By default, outbound click events will occur for all links leading away from the current domain. Links to domains configured for cross-domain measurement (in Tagging Settings) will not trigger outbound click events.

Site search

Capture a view search results event each time a visitor performs a search on your site (based on a query parameter). By default, search results events will be fired any time a page loads with a common search query parameter in the URL. Adjust which parameters to look for under advanced settings.

Show advanced settings

Form interactions

Capture a form interaction event each time a visitor interacts with a form on your website.

Video engagement

Capture video play, progress, and complete events as visitors view embedded videos on your site. By default, video events will be automatically fired for YouTube videos embedded on your site with JS API support enabled.

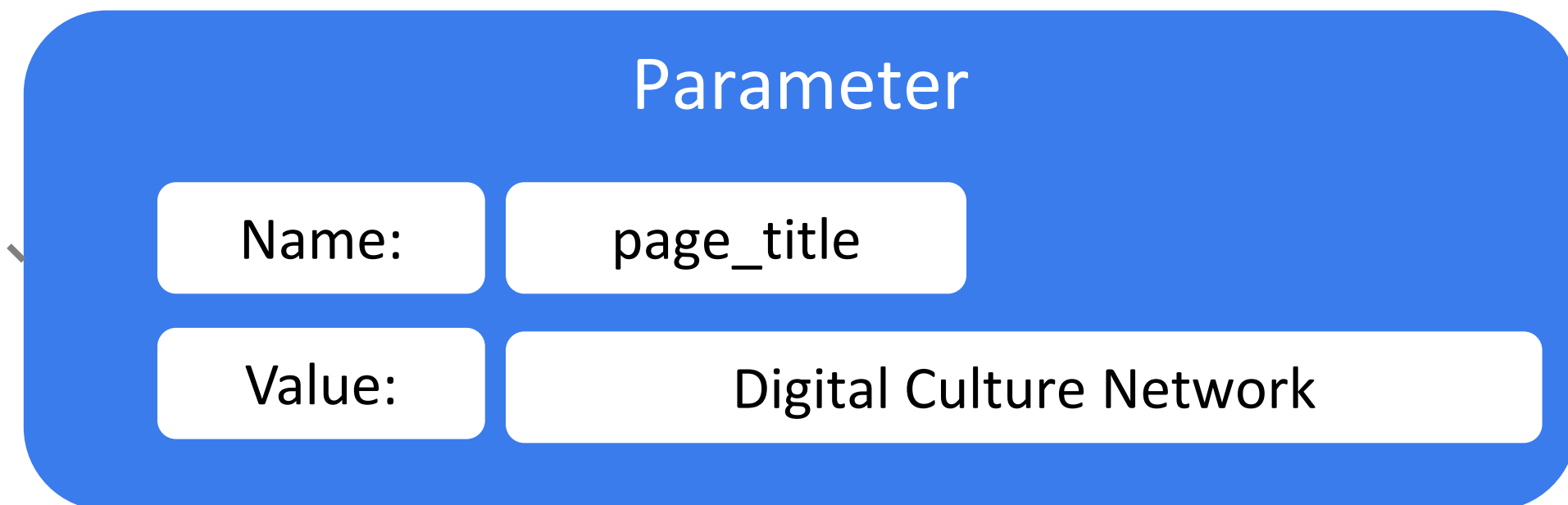
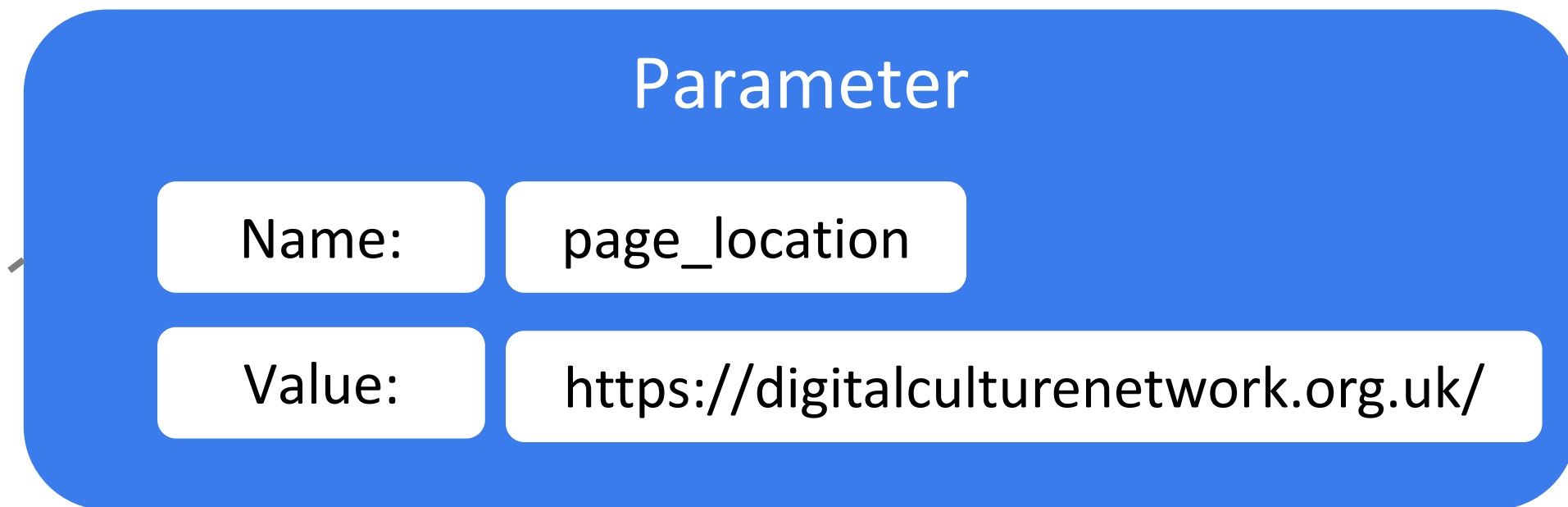
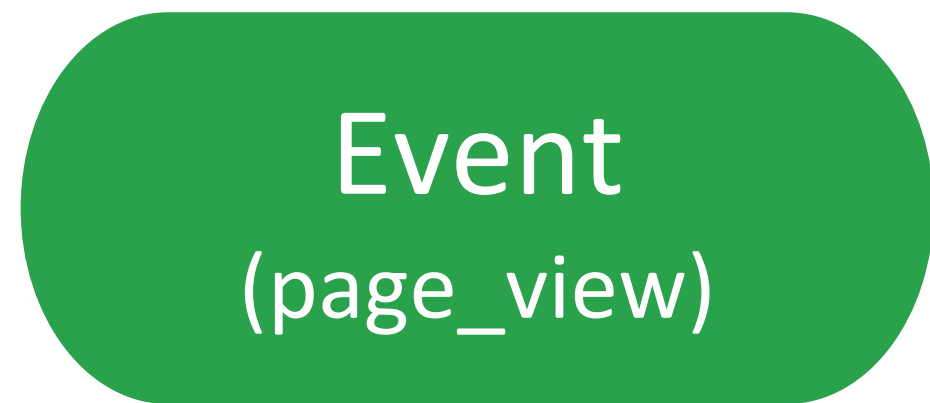
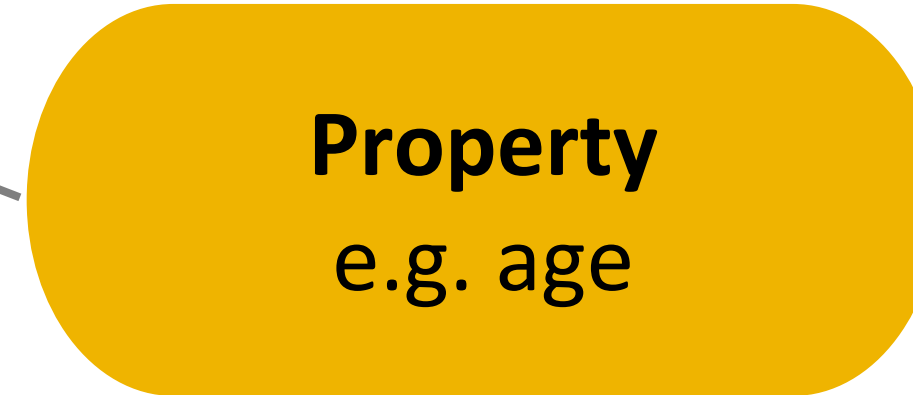
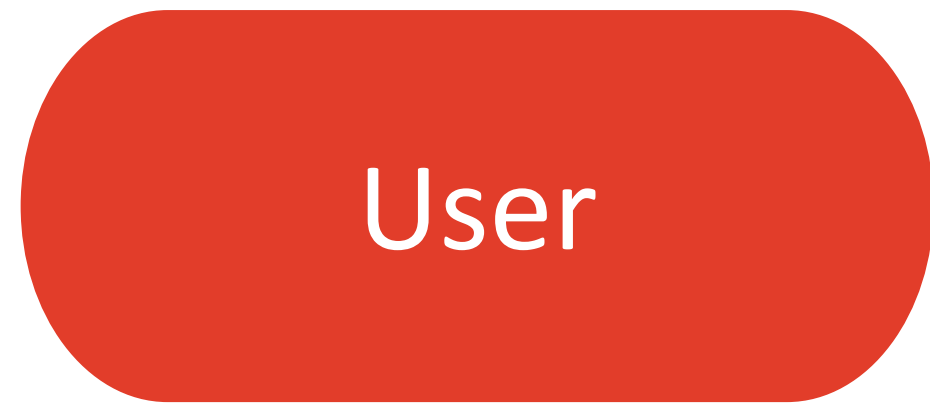
File downloads

Capture a file download event each time a link is clicked with a common document, compressed file, application, video, or audio extension.

Parameters

Each Event passes the good stuff in parameters

- **file_download**
 - **file_extension** – the extension of a file download (for example, 'pdf' or 'txt').
 - **file_name** – the page path of a file download (for example, '/menus/dinner-menu.pdf').





Google Analytics 4 (GA4) - Dimensions and Metrics Cheatsheet v1.2

All Data Dimensions Metrics Expand

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Cohort total users	METRIC	

General

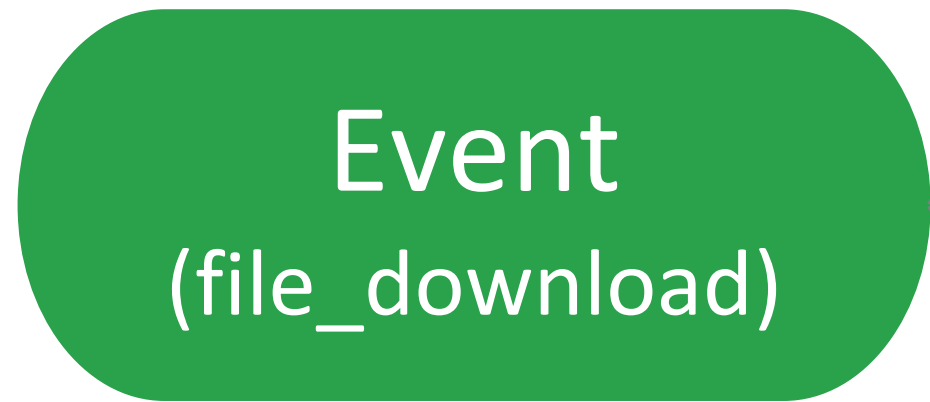
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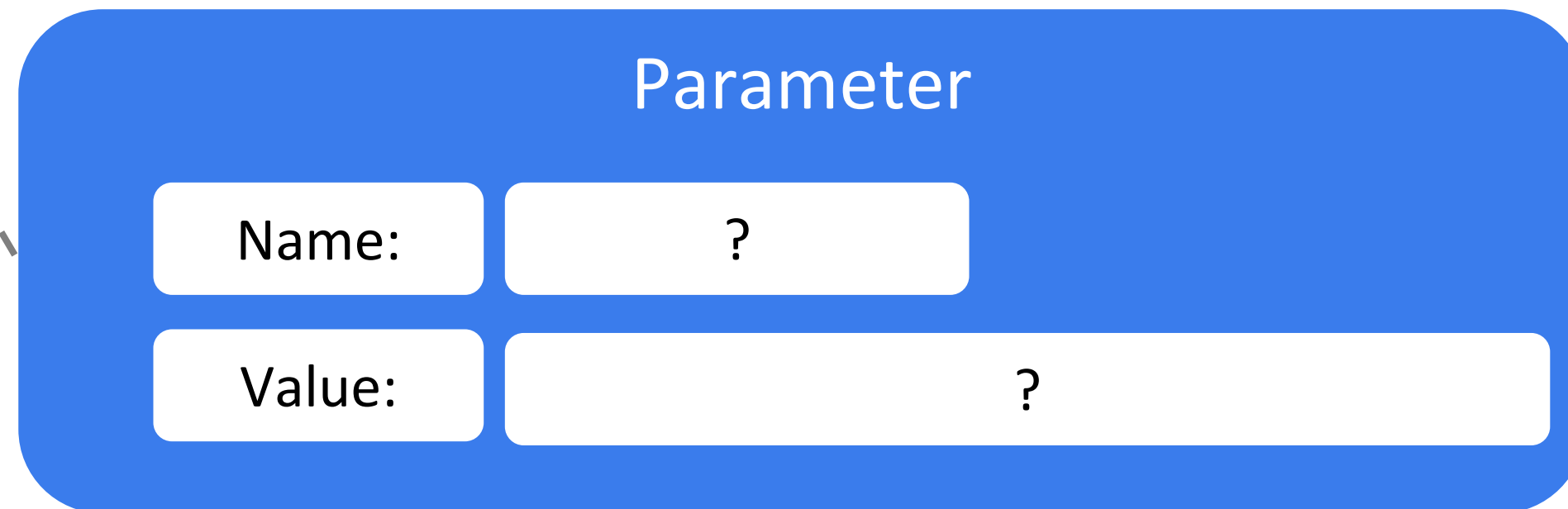
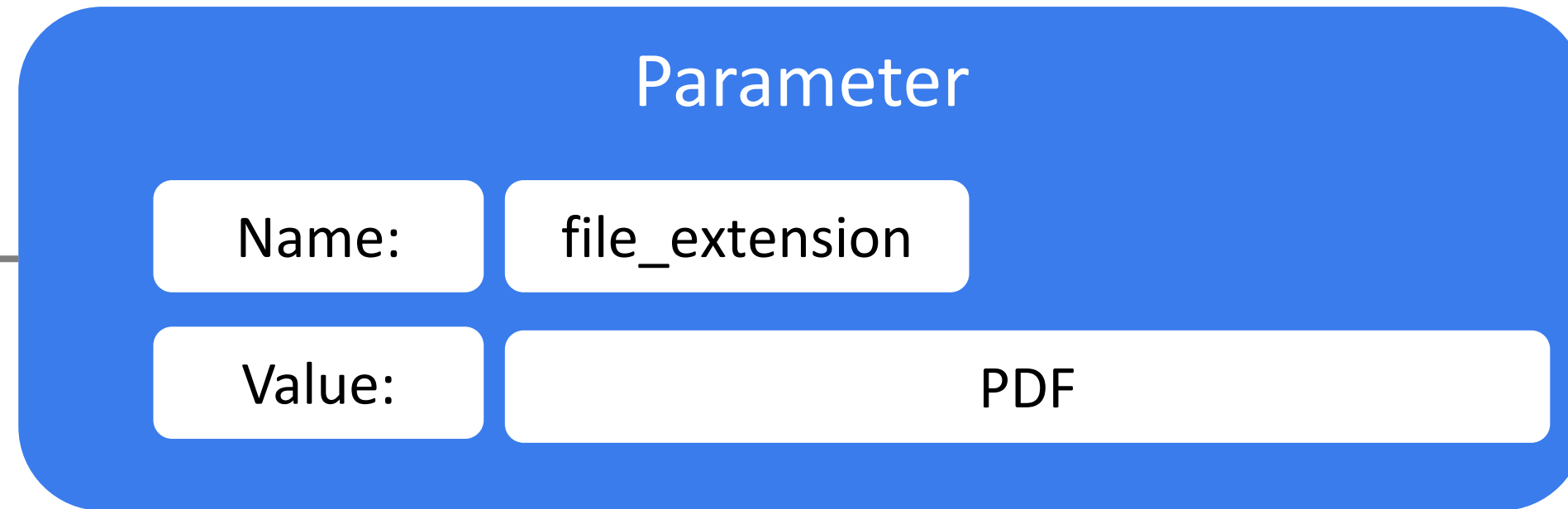
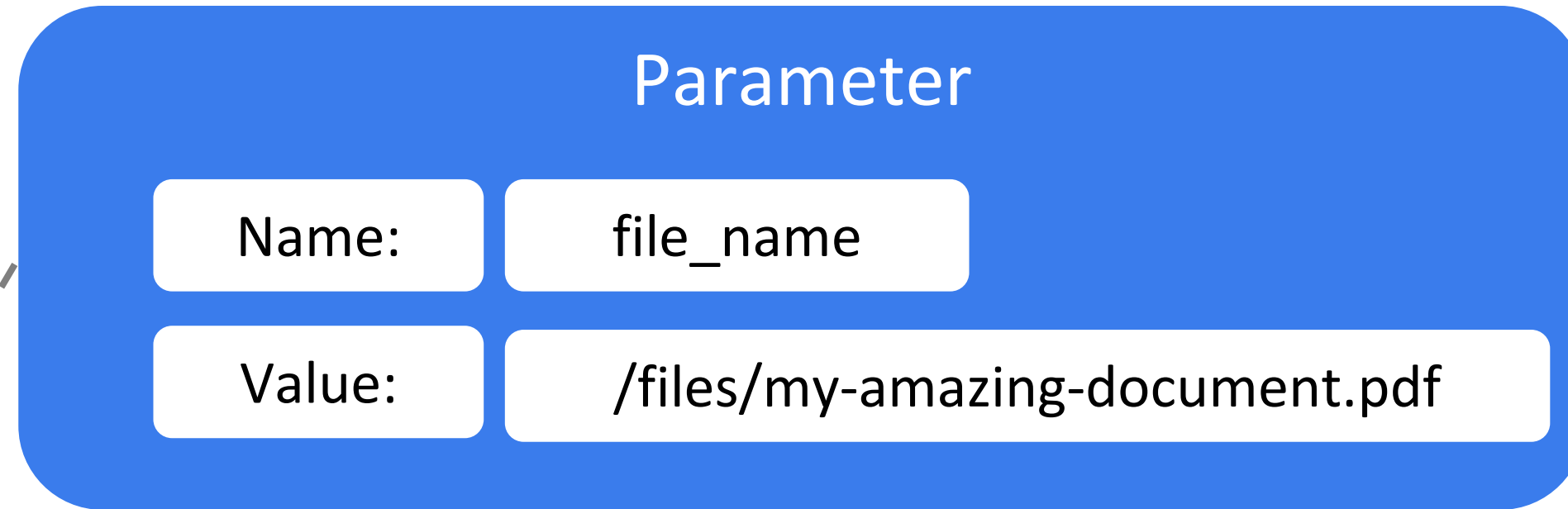
Geography

City	DIMENSION	
City ID	DIMENSION	
Continent ID	DIMENSION	
Continent	DIMENSION	
Country	DIMENSION	
Country ID	DIMENSION	
Latitude	DIMENSION	



Maximum 25
Parameters per Event

A pink arrow pointing upwards from the text to the Event node.



Parameters tell us more

Default collected Parameters:

- language
- page_location
- page_referrer
- page_title
- screen_resolution

Dimensions

Parameters feed Dimensions:

- language → • Language
- page_location → • Page location
- page_referrer → • Page referrer
- page_title → • Page title
- screen_resolution → • Screen resolution

(The names you see in GA4 reports)

GA4 help: Definitions

Analytics Help

Learn the most common reasons why (not set) values appear and how to troubleshoot

Analytics dimensions

[Expand all](#) [Collapse all](#)

[Attribution](#)

[Demographics](#)

Dimension	What it is	How it's populated
Age	The age of the user by bracket. Brackets include '18-24', '25-34', '35-44', '45-54', '55-64', and '65+'.	This dimension is populated automatically when you activate Google signals; however, data thresholds may be applied.
Gender	The gender of the user (i.e., 'Male' or 'Female').	This dimension is populated automatically when you activate Google signals; however, data thresholds may be applied.
Interests	The interests of the user (such as Arts & Entertainment, Games, Sports). Users can be counted in multiple interest categories. This is the same concept as affinity segments in Google Ads.	This dimension is populated automatically when you activate Google signals; however, data thresholds may be applied.

[Ecommerce](#)

[Event](#)

Analytics Help

scroll	each page (i.e., when a 90% vertical depth becomes visible) The event populates the <i>Percent scrolled</i> dimension.	
Outbound clicks click	each time a user clicks a link that leads away from the current domain By default, outbound click events will occur for all links leading away from the current domain. Links to domains configured for cross-domain measurement will not trigger outbound click events. The parameters populate the following dimensions: <ul style="list-style-type: none"><i>Link classes</i> (from link_classes)<i>Link domain</i> (from link_domain)<i>Link ID</i> (from link_id)<i>Link URL</i> (from link_url)<i>Outbound</i> (from outbound)	link_classes, link_domain, link_id, link_url, outbound (boolean)
Site search view_search_results	each time a user is presented with a search results page, as indicated by the presence of a URL query parameter By default, the event is triggered based on the presence of one of the following 5 query parameters in the URL: <ul style="list-style-type: none">qssearchquerykeyword	search_term, optionally 'q_<additional key="">' (where <additional key=""> matches an additional query parameter you specify to be collected under advanced settings). Note: This event only sends the unique_search_term parameter when it has a value of 1 (i.e. when the string is unique to that session).

Understand events

- [\[GA4\] About events](#)
- [\[GA4\] Automatically collected events](#)
- [\[GA4\] Enhanced event measurement](#)
- [\[GA4\] Recommended events](#)
- [\[GA4\] Custom events](#)

NATIONAL DANCE COMPANY

PEASANT PARTY

The best bit in most movies and TV programmes is when the common folk get together for a good old knees up! We think so - our mission is to bring the joy of peasant parties to the world through themed dance events.



JOIN THE PARTY




Part 4:
**Configuring GA4 to
match your objectives**






Admin > Property > Product Links


Link this   Google Ads Links


(if using Google Ads)



 Ad Manager Links

 BigQuery Links  Consider setting this up

 Display & Video 360 Links

 Merchant Center

 Search Ads 360 Links

Link this   Search Console Links

Build your own Events to track your objectives

1. Use the GA4 admin interface
2. Ask a developer to add relevant tags
3. Use Google Tag Manager

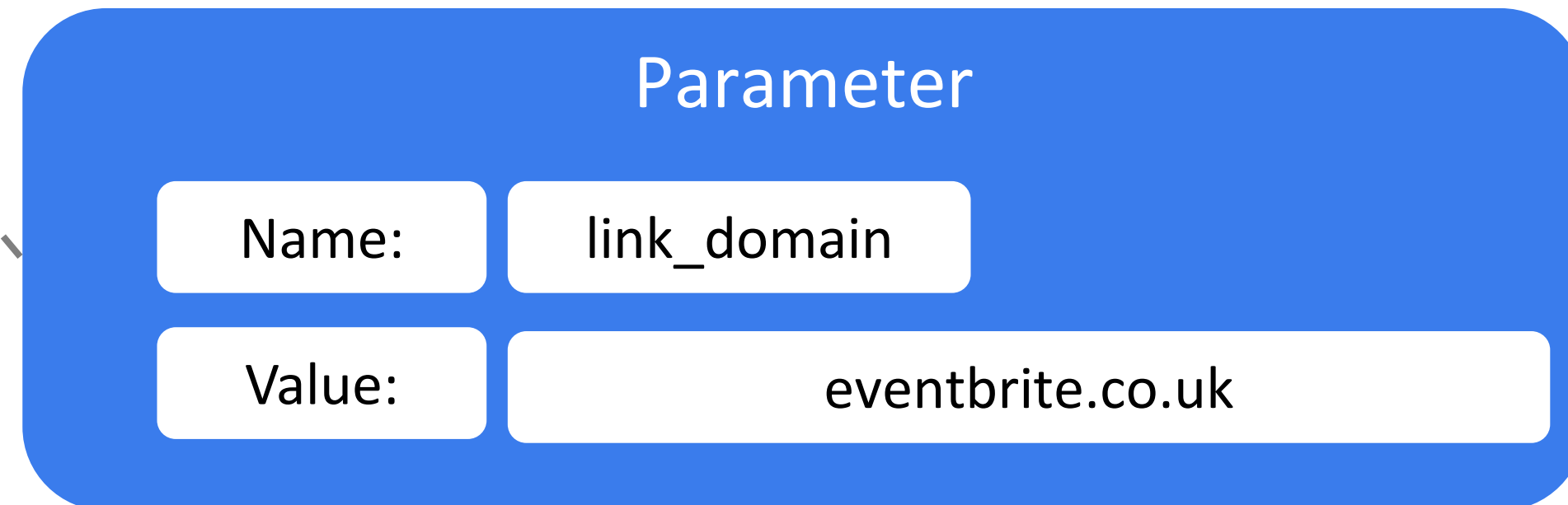
Custom Events

When building new Events consider:

- Can I get this data from existing GA4 Events?
- Do I need **additional** Parameters?

book_now

New Event



Reusing the same Parameters from **click**

Recap

Advanced configuration and custom reporting in Google Analytics 4



**You are not alone,
we are here to help**



James Akers

Google Analytics 4

🕒 1 hr

In this session we can review your current Google Analytics 4 set up, outline important actions you wish to track, and explore relevant reports and analysis.

These **free 1-2-1 sessions** are only for people who work in the creative and cultural sector in **England**.

[Cookie settings](#)

Select a Date & Time



MON	TUE	WED	THU	FRI	SAT	SUN
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Time zone

🌐 UK, Ireland, Lisbon Time (12:52pm) ▾

Troubleshoot



Google Analytics

Q&A



**Digital Culture
Network**



Next steps

Recommended actions:

1. Create a measurement plan – what needs tracking?
2. Attend the Google Tag Manager webinar
3. Book a free 1-2-1 support session

Further resources

Available on our website

James Akers Beginner Read · Typical Reading Time 3 mins

Webinar recording: why are you measuring that?

Attachments:

↓ DCN - why are you measuring that - Sept 2022 (PDF)

Why are you measuring that? | Digital Culture Network

Why are you measuring that?

James Akers Intermediate Read · Typical Reading Time 3 mins

How to use UTM Parameters to track marketing activity

In this article we explain what UTM Parameters are and why they're useful for cultural organisations and individuals to consider using.

What are UTM Parameters?

UTM Parameters are tags you can add to the end of the links you share on different platforms, email campaigns and QR codes. When added to the end of your URL, when a user clicks one of the links can then be tracked in your analytics software (such as [Google Analytics](#)). It is a great way for marketers to see the impact of their own activity: did the users come from a specific source? What did they go on to do on your website? This is

James Akers Beginner Read · Typical Reading Time 9 mins




Getting started with Google Looker Studio



digitalnetwork@artscouncil.org.uk



digitalculturenetwork.org.uk

  [Ask a Tech Champion](#) [Events](#) [External Support](#) [News](#) [About](#) [Knowledge Hub](#) 

We've created resources and advice for you to use during the COVID-19 lockdown. [Read More](#)

Digital skills for the arts

Welcome to your Digital Culture Network

We are here to develop your organisation's digital skills. Working across the arts and culture sector, the Network is led by nine specialist Tech Champions. We want you to be a part of it.

[Browse our Knowledge Hub](#)




Knowledge Hub



Beginner Read
Video and Digital Content

Podcasting and how to get started

This resource provides information and advice on making podcasts. As well as considerations for generating content, it contains guidance on hardware, software, and distribution methods.

 Marc Burns · 2 months ago



Beginner Read
Social Media

Engaging Audiences with Social Media

Whilst your audiences, participants or stakeholders may not be able to engage with you physically at the moment, you can still reach people through social media.

 Haydn Corrodus · 2 months ago



Beginner Read
Social Media

Introduction to Social Media

Social media is a unique and powerful way to help your organisation thrive and engage with your audience. Read on to find out more.

 Haydn Corrodus · 4 months ago





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