

# NightJarr

---



## Sheldon Singh

- 12 years digital experience
- 6 years on Google Analytics
- Currently a Solutions Architect at FNB
- Been around before GTM
- You can call me Panda 🐼

# Agenda

- Data Streams + Events
- Audience Segmentation
- Data Import - Offline Conversion Data
- Custom Reports

# Our Reality



# Demo Account

Click [Here](#)





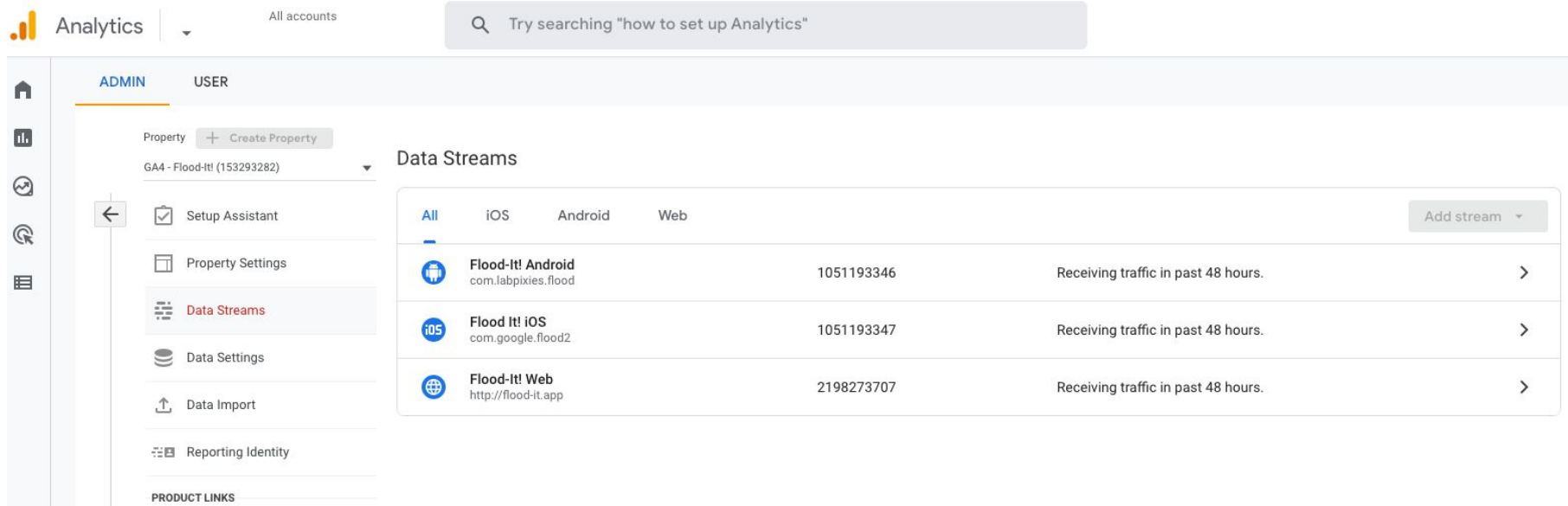
An aerial photograph of a city skyline, likely Johannesburg, South Africa, featuring the prominent Communications Tower. The image is overlaid with a solid blue color. In the foreground, a large circular building with a flat roof and a central chimney is visible. A multi-lane road curves through the middle ground. The background is filled with various high-rise buildings under a cloudy sky.

# GA4: Data Streams + Events

---

# Data Streams

GA4 Property > Admin > Data Streams



The screenshot displays the Google Analytics Admin interface. At the top, the 'Analytics' logo is on the left, and 'All accounts' is on the right. A search bar contains the text 'Try searching "how to set up Analytics"'. Below this, the 'ADMIN' tab is selected, showing a sidebar with navigation options: Setup Assistant, Property Settings, Data Streams (highlighted), Data Settings, Data Import, and Reporting Identity. The main content area is titled 'Data Streams' and shows a table of active streams for the property 'GA4 - Flood-It! (153293282)'. The table has columns for platform (All, iOS, Android, Web), stream name, ID, and status. Three streams are listed: Flood-It! Android, Flood-It! iOS, and Flood-It! Web, all of which are receiving traffic in the past 48 hours. An 'Add stream' button is in the top right of the table.

Analytics | All accounts

Try searching "how to set up Analytics"

ADMIN USER

Property + Create Property




GA4 - Flood-It! (153293282)

←

- Setup Assistant
- Property Settings
- Data Streams**
- Data Settings
- Data Import
- Reporting Identity

PRODUCT LINKS

### Data Streams


All	iOS	Android	Web	
				
<b>Flood-It! Android</b> com.labpixies.flood				1051193346
				Receiving traffic in past 48 hours.
				>
				
<b>Flood-It! iOS</b> com.google.flood2				1051193347
				Receiving traffic in past 48 hours.
				>
				
<b>Flood-It! Web</b> http://flood-it.app				2198273707
				Receiving traffic in past 48 hours.
				>

Add stream ▾


# Web - The “easy one”

Create account+property > Measurement ID > GTM Tag Installation



× Web stream details





 Data collection is active in the past 48 hours.



Stream details



STREAM NAME	STREAM URL	STREAM ID	MEASUREMENT ID
Flood-It! Web	http://flood-it.app	2198273707	G-QCX3G9KSPC 

Events



 **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 + 1 more 




 **Modify events**  
Modify incoming events and parameters. [Learn more](#) 

 **Create custom events**  
Create new events from existing events. [Learn more](#) 

Google tag

 **Configure tag settings**  
Configure your Google tag behavior, including cross-domain linking and internal traffic. [Learn more](#) 

 **Manage connected site tags**  
Load tags for additional properties or products using this stream's on-page Google tag. [Learn more](#)  0 connected

 **View tag instructions**  
Get instructions for how to implement your Google Tag for this data stream. [Learn more](#)   Data flowing



# App - Firebase - Will Require Dev Work

APP NAME

**Flood It! iOS**

PLATFORM

iOS

BUNDLE ID

com.google.flood2

STREAM ID

1051193347

FIREBASE APP ID ?

1:300830567303:ios:09b1ab1d3ca29bda

APP NAME

**Flood-It! Android**

PLATFORM

Android

PACKAGE NAME

com.labpixies.flood

STREAM ID

1051193346

FIREBASE APP ID ?

1:300830567303:android:9b9ba2ce17104d0c

# Firebase Events

## Google Analytics for Firebase

✓ Android

Java  
Android

Kotlin+KTX  
Android

```
Bundle bundle = new Bundle();
bundle.putString(FirebaseAnalytics.Param.ITEM_ID, id);
bundle.putString(FirebaseAnalytics.Param.ITEM_NAME, name);
bundle.putString(FirebaseAnalytics.Param.CONTENT_TYPE, "image");
mFirebaseAnalytics.logEvent(FirebaseAnalytics.Event.SELECT_CONTENT, bundle);
```

MainActivity.java

✓ Web

Web version 9  
(modular)

Web version 8  
(namespaced)

★ [Learn more](#) about the tree-shakeable Web v9 modular SDK and [upgrade](#) from version 8.

```
import { getAnalytics, logEvent } from "firebase/analytics";

const analytics = getAnalytics();
logEvent(analytics, 'select_content', {
  content_type: 'image',
  content_id: 'P12453'
});
```

analytics\_log\_event\_params.js

✓ iOS+

Swift

Objective-C

```
Analytics.logEvent(AnalyticsEventSelectContent, parameters: [
    AnalyticsParameterItemID: "id-\(title!)",
    AnalyticsParameterItemName: title!,
    AnalyticsParameterContentType: "cont",
])
```

ViewController.swift

# GA4 Events

[Link Here](#)

## Types of events

The following types of events are collected automatically:

- **Automatically collected events** are events that Google Analytics collects by default when you set up the Google tag or the Tag Manager snippet on your website or the Google Analytics for Firebase SDK in your app. [Learn more](#)
- **Enhanced measurement events** are events that Google Analytics collects from websites when enhanced measurement is enabled within Google Analytics. [Learn more](#)

The following types of events require some implementation in order to see them in Analytics:

- **Recommended events** are events that you implement, but that have predefined names and parameters. These events unlock existing and future reporting capabilities. [Learn more](#)
- **Custom events** are events that you define. Make sure you only create custom events when no other events work for your use case. Custom events don't show up in most standard reports so you need to set up custom reports or explorations for meaningful analysis. [Learn more](#)

# Automatic Events

## [GA4] Automatically collected events - Analytics Help

Event	Automatically triggered...	Parameters
ad_click (app)	when a user clicks an ad  Publisher events coming from AdMob via the Google Mobile Ads SDK  This event is not exported to BigQuery.	ad_event_id
ad_exposure (app)	when at least one ad served by the Mobile Ads SDK is on screen  This event does not appear in reports and is not exported to BigQuery.	firebase_screen, firebase_screen_id, firebase_screen_class, exposure_time
ad_impression (app)	when a user sees an ad impression  Publisher events coming from AdMob via the Google Mobile Ads SDK  This event is not exported to BigQuery.	ad_event_id, value
ad_querv	when an ad request is made by the Mobile	ad_event_id

# Enhanced Measurement (Web)

## × Enhanced measurement

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](#)



### 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.



# Recommended Events

## [GA4] Recommended events - Analytics Help

### For online sales

We recommend these events when you want to measure sales on your site or app. They're useful for **retail**, **ecommerce**, **education**, **real estate**, and **travel**. Sending the events populates [the Ecommerce purchases report](#). To learn more about these events, see [Measure ecommerce](#).

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

### For games

We recommend these events for games properties. Sending these events populates the [games reports](#) [🔗](#).

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

# Ecommerce

A typical ecommerce implementation measures any of the following actions:

- Select a product from a list
- View product details
- Add/remove a product from a shopping cart
- Initiate the checkout process
- Make purchases or refunds
- Apply promotions

✓ Android

✓ iOS+

✓ Web



# Custom Events

[\[GA4\] Custom events - Analytics Help](#)

## [GA4] Custom events

Measure additional information that's **important to your business**

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. For example, you could create a **donate** custom event for when someone donates to an organization.

Before you create a custom event, review the list of automatically collected, enhanced measurement, and recommended events. These types of events automatically populate prebuilt dimensions and metrics and don't impact the limits on the number of events and parameters you can create.

## Set up custom events

For information about how to set up a custom event, see [Set up events](#) .

# Event Reporting

Analytics

All accounts

Try searching "how to set up Analytics"



- Reports snapshot
- Realtime
- App developer
- Firebase
- Games reporting
- Acquisition
- Retention
- Engagement
  - Engagement
  - Events
  - Conversions
  - Monetization
- Life cycle
  - Acquisition
  - Engagement
  - Monetization
  - Retention
- User
  - Demographics
  - Tech

Events: Event name

Last 28 days Aug 24 - Sep 20, 2022

	Event name	Platform	Event count	Total users	Event count per user	Total revenue
			3,981,635 100% of total	71,630 100% of total	78.81 Avg 0%	\$12.78 100% of total
1	<a href="#">screen_view</a>	Android	1,078,968	45,753	23.59	\$0.00
2	<a href="#">screen_view</a>	iOS	637,122	3,420	186.84	\$0.00
3	<a href="#">user_engagement</a>	iOS	307,289	3,413	90.03	\$0.00
4	<a href="#">level_start_quickplay</a>	iOS	298,466	2,857	104.58	\$0.00
5	<a href="#">level_reset_quickplay</a>	iOS	191,880	890	215.60	\$0.00
6	<a href="#">level_start_quickplay</a>	Android	160,297	22,080	7.26	\$0.00
7	<a href="#">select_content</a>	Android	117,834	30,700	3.84	\$0.00
8	<a href="#">user_engagement</a>	Android	117,072	44,870	2.61	\$0.00
9	<a href="#">level_end_quickplay</a>	iOS	101,319	2,462	41.15	\$0.00
10	<a href="#">level_start</a>	Android	89,023	13,220	6.73	\$0.00
11	<a href="#">session_start</a>	Android	85,134	45,679	1.86	\$0.00
12	<a href="#">level_end_quickplay</a>	Android	82,020	4,990	16.44	\$0.00
13	<a href="#">post_score</a>	Android	70,212	9,690	7.25	\$0.00
14	<a href="#">post_score</a>	iOS	62,074	2,228	27.86	\$0.00
15	<a href="#">level_complete_quickplay</a>	iOS	58,825	2,032	28.95	\$0.00
16	<a href="#">level_complete_quickplay</a>	Android	44,496	1,391	31.99	\$0.00
17	<a href="#">level_end</a>	Android	43,967	9,033	4.87	\$0.00
18	<a href="#">level_fail_quickplay</a>	iOS	42,494	1,909	22.26	\$0.00
19	<a href="#">level_retry</a>	Android	41,627	8,541	4.87	\$0.00
20	<a href="#">level_fail_quickplay</a>	Android	37,525	4,677	8.03	\$0.00



**EVERYONE'S GETTING AN EVENT**

# Enrich Events - Custom Definitions

## [GA4] Custom Google Analytics dimensions and metrics

### [GA4] Custom dimensions and metrics

Create new dimensions and metrics from event parameters



*If you haven't customized your data collection code, you probably do not need to read this article or use custom dimensions and metrics.*

Google Analytics [automatically provides many dimensions and metrics](#). However, if you have customized your data collection code to collect non-standard event parameters, you'll need to create custom dimensions and/or custom metrics in order to make use of these event parameters. For example, let's say that you collect the author name, the article title, and the number of pages in the article each time a visitor to your website reads an article.

```
gtag('event', 'read_article', {  
  "author": "Bill Q",  
  "title": "How to Build a Backpack",  
  "number_of_pages": 2,  
});
```

You can create an Author dimension that gets its values from the `author` parameter and an Article\_Length metric that gets its value from the `number_of_pages` parameter.

You don't need to set up custom dimensions and metrics for data collected through [automatically collected events](#), [enhanced measurement](#), and [recommended events](#).

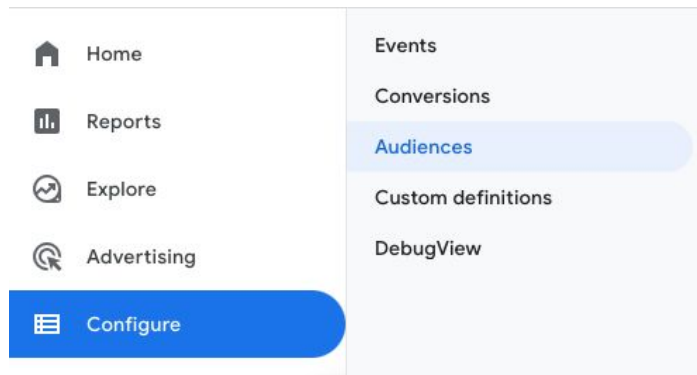
The screenshot shows the 'Create custom dimension or metric' dialog in Google Analytics. It has two main sections: 'Dimension' and 'Metric'. The 'Dimension' section is active, showing a text input for 'Dimension name' with a help icon, a 'Description' text area, and a dropdown for 'Event parameter' currently set to 'Select an event parameter'. The 'Scope' dropdown is open, showing 'Event' (selected) and 'User' options. The 'Metric' section is partially visible below, showing a 'Metric name' input and a 'Calculation' dropdown.






# Audience Segmentation

# Audience Segmentation



						<a href="#">New audience</a>
Audience name	Description	Users <sup>(?)</sup>	% change	Created on <sup>↓</sup>		
All Users	All users	< 10 Users	-	Mar 28, 2022		
Purchasers	Users who have made a purchase	< 10 Users	-	Mar 28, 2022		

# Audience Segmentation - Demo Account

Audience name	Description	Users <sup>?</sup>	% change	Created on <sup>↓</sup>
Crashing Users	Users who experience a fatal exception	651	↓ 6.7%	Nov 2, 2016
Level Beaters_v2	Users who have completed at least one progressive level	13,082	↑ 0.8%	May 14, 2016
Expert Users	Users who have beaten all progressive levels	249	↓ 8.5%	May 14, 2016
Intermediate Users	Users who have completed the first 10 progressive levels	1,116	↓ 5.3%	May 14, 2016
Level Beaters_v1	Users who have completed at least one progressive level	12,444	↑ 0.8%	May 14, 2016
Extra Steps Users	Users who have used extra steps	5,546	↓ 0.2%	May 14, 2016
All Users	All users	50,524	↓ 3.1%	May 11, 2016
Purchasers	Users who have made a purchase	31	↓ 8.8%	May 11, 2016



# Audience Builder

Start from scratch



Create a custom audience

## Suggested audiences

Additional audience suggestions for you to consider

GENERAL

TEMPLATES



PREDICTIVE



### Recently active users

Users that have been active in a recent period



### Non-purchasers

Users that have not made a purchase



### Purchasers

Users that have made a purchase



### 7-day lapsed users

Users who were once active, but have not been active for the last 7 days.



### 7-day lapsed purchasers

Purchasers who were once active, but have not been active for the last 7 days.



### 7-day unnotified users

Users who have not received push notifications in the past 7 days.

# Audience Builder

### Suggested audiences

Additional audience suggestions for you to consider

GENERAL   **TEMPLATES**   PREDICTIVE

**Demographics**  
Segment your users by demographic information.

**Technology**  
Segment your users by their web and mobile technologies.

**Acquisition**  
Segment your users by acquisition method.

### Suggested audiences

Additional audience suggestions for you to consider

GENERAL   TEMPLATES   **PREDICTIVE**

Analytics builds predictive audiences based on behaviors such as buying or churning. [Learn more](#)

**Likely 7-day purchasers**  
Users who are likely to make a purchase in the next 7 days.  

ELIGIBILITY STATUS  
 **Not eligible to use**

**Likely 7-day churning users**  
Active users who are likely to not visit your property in the next 7 days.  

ELIGIBILITY STATUS  
 **Not eligible to use**

**Predicted 28-day top spenders**  
Users who are predicted to generate the most revenue in the next 28 days.  

ELIGIBILITY STATUS  
 **Not eligible to use**

**Likely first-time 7-day purchasers**  
Users who are likely to make their first purchase in the next 7 days.  

ELIGIBILITY STATUS  
 **Not eligible to use**

**Likely 7-day churning purchasers**  
Purchasing users who are likely to not visit your property in the next 7 days.  


ELIGIBILITY STATUS  
 **Not eligible to use**

# Audience Builder - Live Demo

← Untitled audience

Cancel

Save

 Add a description

 Include **Users** when:



Add new ... ▼

Or

And

+ Add condition group | ≡ Add sequence

+ Add group to exclude

Membership duration

☒ 30 days

☐ Set to maximum limit

Audience Trigger

+ Create new

Your audience contains one or more unsupported concepts

Summary

Users in this audience

-

100% of all users

Include

-

Exclude

-




# “Old School” Audiences - URL Based

Include **Users** when:

Search items

Ecommerce	▶	
Event	▶	Content ID
Gaming	▶	Content type
General	▶	Hostname
Geography	▶	Page location
Link	▶	Page path + query string
Page / screen	▶	Page path + query string and screen class
Platform / device	▶	Page path and screen class
Publisher	▶	Page referrer
Session	▶	Page title
Time	▶	Page title and screen class

Condition scoping

-  **Across all sessions**
-  Within the same session
-  Within the same event

An aerial photograph of a city skyline, likely Johannesburg, South Africa, featuring the prominent Communications Tower (MTe) in the background. The image is overlaid with a solid blue color. The text "Data Import" is centered in the middle of the image in a white, bold, sans-serif font.

# Data Import



# Data Import

## [GA4] About Data Import

### Admin > Data Import

#### Data source details

Data source name\*

Data type ⓘ

##### Cost data

- ☒ Import ad cost data from non-Google sources. This upload associates cost data with the campaigns, sources, and mediums at report/query time. This data can be deleted without impacting underlying event data.

##### Item data

- ☐ Import product metadata such as brand, category, and/or variant. This data, once uploaded, is used in event processing in place of collected parameters as well as to fix historically data in reporting. Removing this data requires a data deletion.

##### User data by User ID

- ☐ Import User ID data to update and associate new user property values for each User ID you upload, based on your other data sources. Removing this data requires a user or data deletion.

##### User data by Client ID

- ☐ Import Client ID and/or App\_Instance\_ID data to update and associate new user property values for each id you upload, based on your other data sources. Removing this data requires a user or data deletion.

##### Offline event data

- ☐ Import offline events from sources without an internet connection or that otherwise cannot support real time event collection via SDKs or Measurement Protocol. These events, once uploaded, are processed as though they were collected via our SDKs using the timestamp provided or the time of upload if not provided. Removing this data requires a user or data deletion.

# Offline Event Data

[\[GA4\] Import offline events - Analytics Help](#)

## Notes:

- Upload Custom or Recommended Events
- Uses provided Timestamp OR time of upload
- CSV must be formatted correctly - use template
- Required Fields
  - Client Id or App Instance Id
  - Tag or Firebase Id
  - Event\_name
  - Imported Field
    - Timestamp
    - User\_id (optional)
    - Event parameters (Custom Definitions)



# Offline Event Data

## Template

Here is an example CSV template for event data. If you need to create your upload files by hand, use this example as a guide.

measurement_id	client_id	user_id	timestamp_micros	event_name
G-12345ABCDE	1234567890.0987654321	1000001	1609488000000000	page_view
G-12345ABCDE	1234567890.0987654321	1000001	1609488060000000	page_view
G-12345ABCDE	1234567890.0987654321	1000001	1609488120000000	video_play
G-67890ABCDE	2345678901.9876543210	1000002	1609574400000000	page_view
G-67890ABCDE	2345678901.9876543210	1000002	1609574460000000	page_view
G-67890ABCDE	2345678901.9876543210	1000002	1609574520000000	page_view
G-67890ABCDE	121212.3434	1000003	1609574520000000	page_view
G-67890ABCDE	121212.3434	1000003	1609660801000000	view_item_list
G-67890ABCDE	121212.3434	1000003	1609660860000000	select_item
G-67890ABCDE	121212.3434	1000003	1609660870000000	page_view
G-67890ABCDE	121212.3434	1000003	1609660930000000	view_item
G-67890ABCDE	121212.3434	1000003	1609660950000000	add_to_cart
G-67890ABCDE	121212.3434	1000003	1609660970000000	begin_checkout
G-67890ABCDE	121212.3434	1000003	1609660975000000	page_view
G-67890ABCDE	121212.3434	1000003	1609660980000000	purchase

# Offline Event Limits

## Limits

Events, parameters, and user properties that use [reserved names](#) will be rejected.

Item-event parameters (e.g., `item_list_name`) without values will be rejected. Item-event parameters are supported for [recommended subset of events](#) (e.g., Ecommerce, Jobs, Travel).

Event and parameter names need to observe the following rules:

- Events can have a maximum of 25 parameters.
- Events can have a maximum of 25 user properties.
- User property names must be 24 characters or fewer.
- User property values must be 36 characters or fewer.
- Event names must be 40 characters or fewer, may only contain alpha-numeric characters and underscores, and must start with an alphabetic character.
- Parameter names (including item parameters) must be 40 characters or fewer, may only contain alpha-numeric characters and underscores, and must start with an alphabetic character.
- Parameter values (including item parameter values) must be 100 character or fewer.



# Custom Reports

---

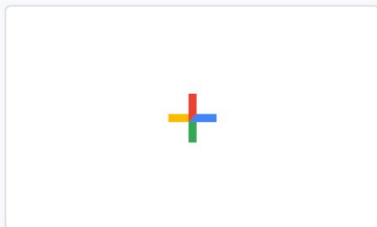
# In Conjunction with Data Studio





# Custom Reports - *Explore* - Live Demo

## Techniques



### Blank

Create a new exploration



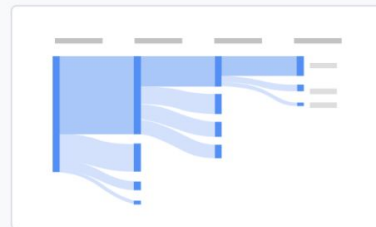
### Free form

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?



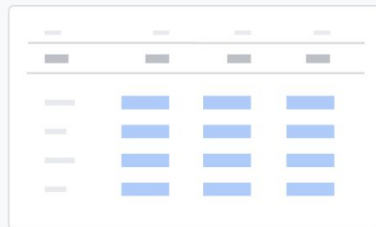
### Segment overlap

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



### Cohort exploration

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

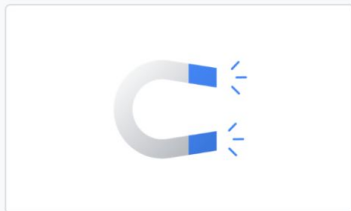


### User lifetime

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

# Custom Reports - *Explore* - Live Demo

## Use cases



### Acquisition

How successful are your marketing efforts?



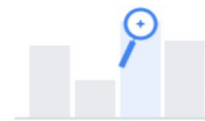
### Conversion

What does your customer journey to conversion look like?



### User behavior

How do your users move through your app or site from where they first land?

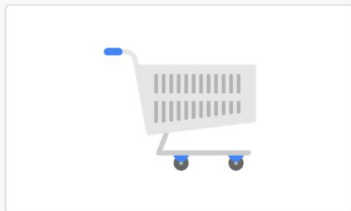


### Predict top spenders

Which marketing channels will help me find my top spenders?

NEW

## Industries



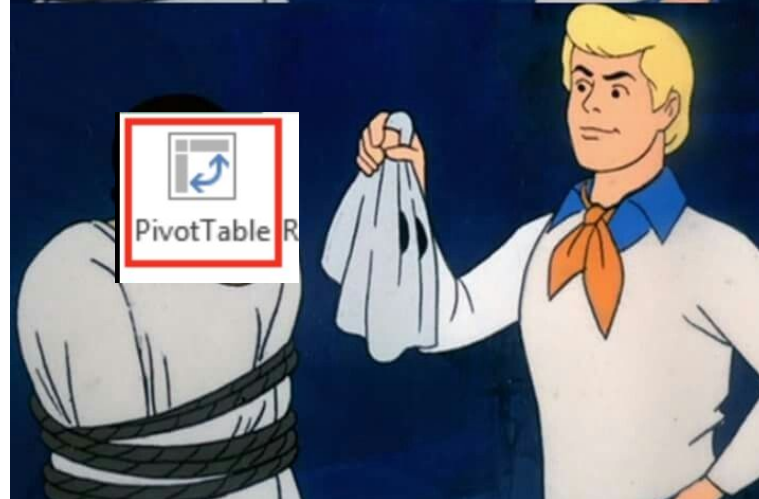
### Ecommerce

How are your ecommerce platforms doing?



### Gaming

How are your games performing?







The background of the slide is a high-angle, aerial photograph of a city skyline, likely New York City, showing a dense cluster of skyscrapers and buildings. The entire image is overlaid with a solid blue color. In the center, the text 'Q&A' is displayed in a large, white, sans-serif font. To the right of the 'Q&A' text, there is a vertical banner with the text 'HAPPY PEOPLE LIVE CLOSE TO WHERE THEY WORK'. In the lower right area, there is a building with a clock tower and the text 'MAY OF MARKHAM'.

# Q&A

HAPPY  
PEOPLE  
LIVE  
CLOSE TO  
WHERE  
THEY  
WORK

MAY OF  
MARKHAM



An aerial photograph of a dense urban landscape, likely a city center, with numerous high-rise buildings and skyscrapers. The entire image is overlaid with a solid blue color. In the center, the word "End" is written in a large, white, sans-serif font. To the right of the word, there is a vertical sign on a building that reads "HAPPY PEOPLE LIVE CLOSE TO WHERE THEY WORK". In the lower right, there is a building with a clock tower and the text "MARKHAM" visible.

End

HAPPY  
PEOPLE  
LIVE  
CLOSE TO  
WHERE  
THEY  
WORK

MARKHAM

# Our services

- Migration to GA4 & events | For attribution
- Setup audiences | For sales
- Real-time dashboards | For insight

[ferdie.bester@nightjarr.com](mailto:ferdie.bester@nightjarr.com)

Book a [timeslot](#)