

# Google Analytics (GA4)

The features that matter to Ecommerce teams

# Come on in!

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# Intro (you can skip this bit)

Ecommerce teams have used Google Analytics for over a decade to understand audience composition, user behaviour and marketing effectiveness.

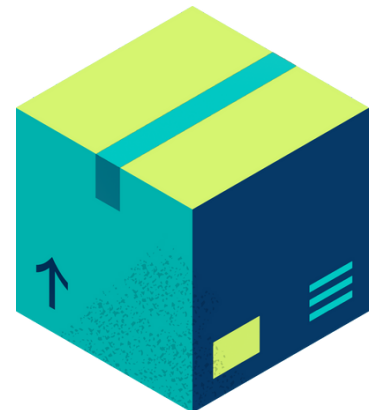
But the world has changed in recent years. Consumer demands for privacy and regulatory pressure on cookie-based tracking are shifting the measurement landscape.

In addition, web analytics has traditionally been based on browser sessions (not people), making it hard to know the full picture of customer behaviour. Specially as consumer journeys become more complex.

With the ambitious launch of a new property type (GA4), Google has completely revamped the measurement model and made it user-centric and based on events.

This brings a huge amount of new possibilities for ecommerce brands.

This is what this paper is about.



# Need help implementing??

Google will stop processing data for Universal Analytics in 2023.

However, it is best to set up GA4 as soon as possible while leaving Universal Analytics running in the background, in order to keep its valuable historical data.

Implementing GA4 for ecommerce requires development work on the Data layer. If you need help getting your GA4 tracking all your ecommerce events, get in touch today!

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# 1. Ecommerce Event Tracking

Events are user interactions with an online store or app. For example: pageviews, button clicks, purchases, payment submission or add-to-baskets.

Events exist in the legacy Universal Analytics but are not tracked by default. And can only accept up to 4 parameters.

Now, Google Analytics (GA4) uses Events (and loads of parameters) at the centre of its measurement model. Many Ecommerce events come preconfigured already (amazing!), but more events can be manually set up via Google Tag Manager. Pretty much anything you can imagine, you can track as an event. Then use it anywhere you can think of. Wow!

## What can I do with it?

Report on interactions such as outbound clicks, video views, file downloads, site searches and scrolls, out of the box.

Report on more complex interactions such as, “view item” “begin checkout”, “submit payment info” or “add to wishlist” with minimal set-up on GTM.

Create any custom event you can think of.

Use events to create audiences or custom metrics and dimensions that you can use on any relevant analysis technique

Activate event-based audiences on Google Ads.

## Give me an example or two

- Create an event for people who views product from a given product line or brand, then see how their behaviour might differ to other people
- Create an audience for people who have started checkouts but have never purchased. Activate on Google Ads to target with a YouTube video or Shopping ad.

## 2. The Explore Tab

The Explore Tab is the big headline introduction in GA4.

If you were a power user in GA3, you were using the pre-defined reports to swap dimensions, compare segments and apply advanced filters to your data. Or maybe you were using Custom reports, which were a bit clunky but gave you more freedom slicing data.

Explorations take this to the next level by allowing you to combine segments, dimensions, metrics, filters, techniques and visualisation types to answer any possible question you might have, on any audience.

You also get a useful Template Gallery with techniques (pre-defined combinations of dimensions, metrics and analysis types) and use-cases (group of techniques to understand customer behaviours such as “Conversion” or “Acquisition”)

## What can I do with it?

Explore data by combining segments, dimensions, metrics, analysis and visualisation types to answer any possible question on your audience (Free-form Analysis)

Understand how users navigate your site (Path Analysis)

Zoom in on a particular key journey and observe how your users complete the steps in a sequence (Funnel Analysis)

Analyse customer behaviour over time after an event, and compare how different cohorts (audiences who trigger the same event in a given period of time) behave. (Cohort Analysis)

Compare how different segments of audiences overlap and explore how their behaviour differs as they belong to a segment, or a combination of them (Segment overlap).

Analyse predictive lifetime value metrics to understand estimated future customer value for any audience. (User Lifetime)





# 3. Lifetime value analysis

Lifetime analysis is a lot more powerful in GA4, and it's available in the Explore tab to compare segments, break down by dimensions, pick metrics, add filters, etc.

Previously, non-purchasers were aggregated with purchasers. This is confusing. It muddles the waters as lifetime value refers to paying customers, not users. It was a nice beta feature, but most retailers didn't use it.

Now, you can see lifetime value for customers only (for example by using the ecommerce event "purchase" to create an audience), giving you a real customer value.

Not only this, but now GA4 is introducing predictive metrics (see next section), which means that besides the historical lifetime value, you can now also find out predicted revenue, churn probability and purchase probability.

## What can I do with it?

You can find out your actual customer value. This also means you can balance your customer value with your customer acquisition costs (CACs) to keep your business scaling sustainably.

You can see how your actual customer value varies by any possible segmentation or dimension. For example, you can compare customer value by geography, acquisition campaign, keyword, items purchased, content consumed, etc.

You can see additional metrics to estimate future customer value such as their probability of churning or predicted revenue.

Overall, make informed decisions on customer acquisition parameters such as campaigns, Google Ads keywords, landing pages or coupon code.

## Give me an example or two

- Retailers have a love-hate relationship with discounting. You can now understand the impact of discounts in long term customer behaviour such as lifetime or predicted revenue.
- Analyse how lifetime values vary depending on the Google Ads keyword used to acquire each customer. You may have hypothesis about the value of customers by different keywords, and now you can put that to the test!

# 4. Predictive metrics

Google Analytics introduces Predictive metrics. They forecast the probability of future user behaviour, based on available data.

There are three metrics: Purchase probability, Churn Probability and Predicted Revenue. They are available to create audiences, as well as for analysis on the User Lifetime technique in the Explore Tab.

Because these values are inferred from the available data, data sample sizes have to be large enough for these metrics to be available. You can check if these metrics are available in the Audiences tab. (Configure > Audiences)



## What can I do with it?

Analyse predicted user behaviour in various audiences or through breakdown dimensions. This gives you a deeper level of understanding of the value of different user segments or acquisition channels.

Activate audiences in marketing channels based on their predicted behaviour.

Google Analytics can now let you know when the data doesn't conform to the prediction. This is what's called anomaly detection. If the amount of organic traffic is larger than the historical data would have suggested, Google will alert you, so that you can investigate further and uncover opportunities.

## Give me an example or two

- Compare predicted revenue across various locations to make investment decisions.
- Create an audience for people with a high probability of purchase in the next 7 days and activate this audience in remarketing. Or do the same for people likely to churn in the next 7 days (and test different messaging to find a winning formula)

# 5. Path Analysis

Have you used Path Analysis in Universal Analytics? Do you find it a bit painful? Hard to get actionable insights from?

The new Pathing Analysis (GA4) from the Explore tab is more user-friendly and has new features. It still requires some patient exploration, but it's a lot more insightful into path to purchase and to uncover potential user pain points.

The main improvement is the ability to see either events or pages at any step of the user journey. This means you not only get to see the content they go through in a session, you also see the events they trigger along the way.

Combining this with breakdown dimensions, segments and filters means you can zone in on any customer sub-set and circumstance.

Lastly, you can now export into CSV, which means you can now work with quantitative data, making decisions easier to make.

## What can I do with it?

You can see all the events triggered across any customer journey. For example, you can see how users view products, add them to their baskets, add payment information and complete a purchase.

You can reverse engineer any event, such as a purchase, begin-checkout or add-to-basket, and see what pages customers visited to get to those points. And what events they triggered along the way.

Uncover pain points and looping behaviour for a particular user journey, for example “VIP sign up from mobile traffic”.

## Give me an example or two

- Find out what steps new users took to place their first purchase and how those compare to those who didn't end up placing one.
- Find out what pages drove more users away from the path to purchase. If for example the “Shipping information” page is causing people to exit the journey, consider how your delivery proposition stacks up against customer expectations.
- Analyse how users successfully complete your refund process, and uncover any pain points they might be experiencing.

# 6. Funnels

Funnels are crucial for ecommerce teams who need to understand how customers navigate an important journey such as a checkout flow.

Funnels are now part of the Explore tab, and have got a bunch of new exciting features.

Funnel behaviour can be analysed on the fly -no need to build your funnels in advance. Not only that, but you can now also build in time constraints (eg, users need to do a step within 5 minutes to be counted).

You can also segment your funnels, all without that pesky sampling of data.

## What can I do with it?

You can see how users complete each step of a given journey (eg a checkout) and see the steps that are causing the most abandonments. You can do this for any segment, eg users of a specific locale.

You can see how long it takes on average for users to complete each step in a funnel.

## Give me an example or two

- Monitor abandonment rates on a checkout flow for new customers and experiment with small tweaks to the checkout to optimise buy-through rate.
- See how long it takes for someone to complete a refund process online. Compare it with a new version of the process.



# 7. Cohort Analysis

Cohort analysis is a beta report in Universal Analytics that delivers more promise than substance. Time spans are limited to 3 months, often not enough for retailers with a longer purchase cycle. Also, you can only create cohorts to include users by the acquisition date (ie, include users who were seen for the first time between the dates of each cohort). Then, you can see how those users behaved for up to 3 months after the acquisition date. For a limited set of metrics.

Now, GA4 brings more flexibility to Cohort Analysis by enabling any custom event to be used as inclusion criterion for the cohort. You may want to see the subsequent behaviour (via any metric) of users who viewed a product page, purchased an item, began a checkout, visited a page with a coupon code, came from a particular email campaign, or any imaginable event.

## What can I do with it?

Use any event as the basis to include users in each cohort, not just by acquisition date (first touch, in GA4 language)

Use different inclusion and returning criteria. Inclusion criteria decides whether to include a user in the report and gives you a topline figure for that user on the first column. A returning criterion decides whether to return the specified metric for the users on the report, or not.

Rolling and cumulative calculations of the metrics, not just standard.

All the bells and whistles that come with the Explorer tab - filters, breakout dimensions, etc.

## Give me an example or two

- Compare the impact in revenue over time (not just first-purchase conversion rate) for audiences which were exposed to a discount coupon on their first visit, versus those who weren't. Factor in the higher profit margin for the control group to assess the ROI of discount campaigns over a period of up to six months.
- Analyse the impact of newly designed product pages on add-to-basket behaviour, purchases or predicted revenue. Do this over a long period of time.

# 7. Site search

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Search is a key feature for most ecommerce sites. Users searching for products are approx 2x more likely to make purchases, as their intent is higher than those not searching (source: IMRG)

Monitoring the terms searched, and the volume of those searches gives merchants great insight into their customer needs and how the shop is meeting them.

Google Analytics now tracks “view\_search\_result” automatically, alongside parameters such as the term of the search.

## What can I do with it?

Compare the behaviour of users who search for items vs those who don't. Or compare the likelihood of someone searching for an item depending on the acquisition channel

Find out what products are users searching for to prioritise new product launches.

Find out what product searches are more likely to result in a checkout. Optimise visual merchandising accordingly.

## Give me an example or two

- Your customers are searching for a tote bag but you don't sell any. Release a new tote bag and promote via email or even Google Ads.
- Create audiences for people searching your most popular categories, then use segment overlap to see what products tend to be sought after by similar people. This can inform your product recommendations.

# 8. BigQuery

BigQuery is Google's Data Warehouse product. Data scientists use it for a variety of purposes, from complex multi-channel attribution modelling to propensity modelling in CRM.

With GA4, you can connect with BigQuery free of charge!

With BigQuery, you can enhance GA data with other data sources (eg CRM, Facebook ads), as well as send all the raw data from GA.

Sending raw data from GA to BigQuery means that you can reserve engineer every single transaction and find out how many sessions, devices, events, page views and channels are involved.

This can make wonders in guiding your marketing investment.

# Happy analysing!

We hope you enjoyed scanning through this document and got some ideas!

Don't be shy - if you enjoyed this paper share it on your socials. And if you want to have a chat or send any feedback you can send us an email too.

Love, and add-to-baskets.

The GENE team

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