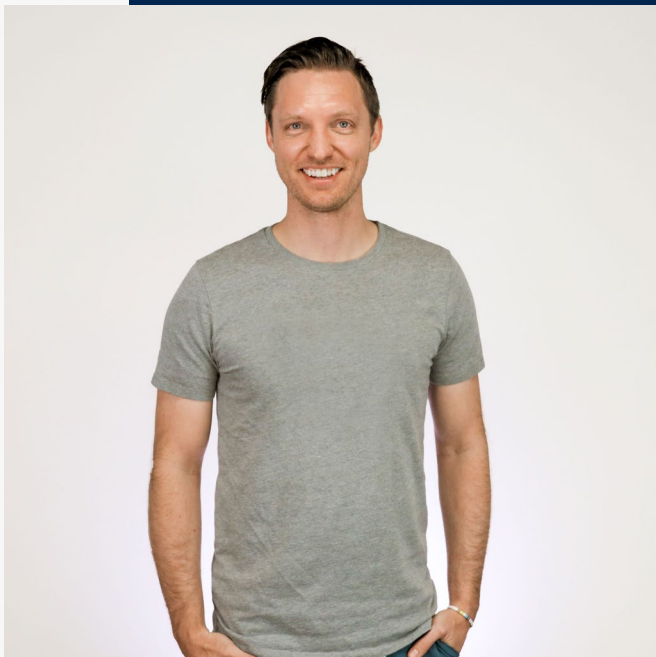# The Most Common GA4 Collection Errors

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Your Presenter

Mike Query

CEO / Founding Engineer

- Before I Found Analytics:
    - Dir. of Eng at Ultrasonic R&D (7 years)
    - Embedded systems, signal processing, web apps, data eng

- Founded adMind (2015) to "practice measurement with marketers"

- Last on My Audible: "Make Time"

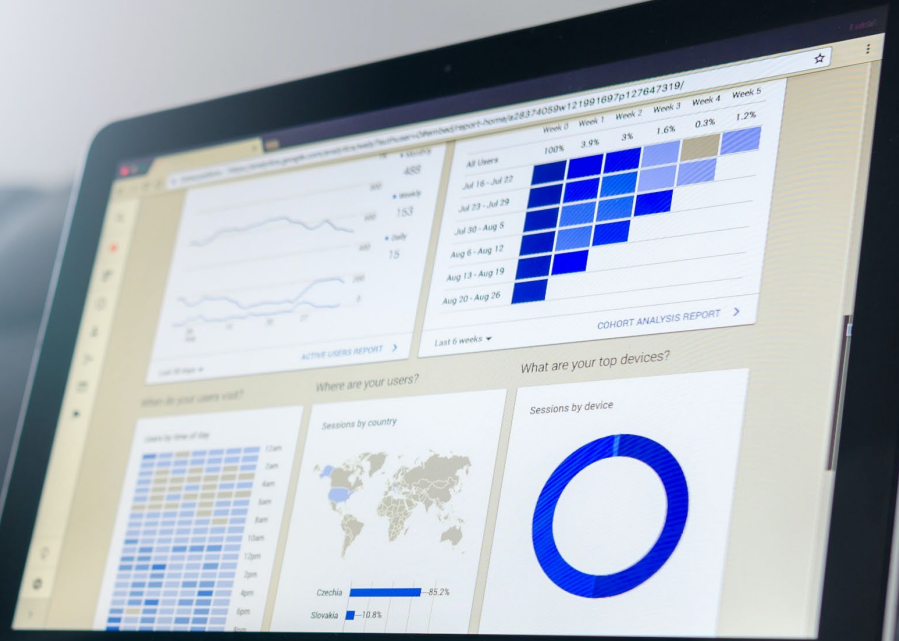- If my spouse had the mic, she'd embarrass me by…

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Today's Agenda

- A Disclaimer

- The Most Common GA4 Data Collection Errors

- How to Spot Them

- How to Fix Them

- How to Keep Them Gone

DISCLAIMER

We Believe…

- An insight is "something you don't know, that you can act on to improve performance"
    - Insights come from analyzing not tracking. Analyze more, track less.

- In rapid, practical AF data collection
    - Sometimes sooo dirty you'd blush telling your mom
    - But…… you gotta wear your seatbelt (have data quality monitoring)

- In late data binding. Don't waste time collecting it if you could just categorize it.

- In warehouses over CDPs

- Dashboards are **products**. Be lean. Iterate. Study the Job to Be Done. If isn't loved it shouldn't exist.
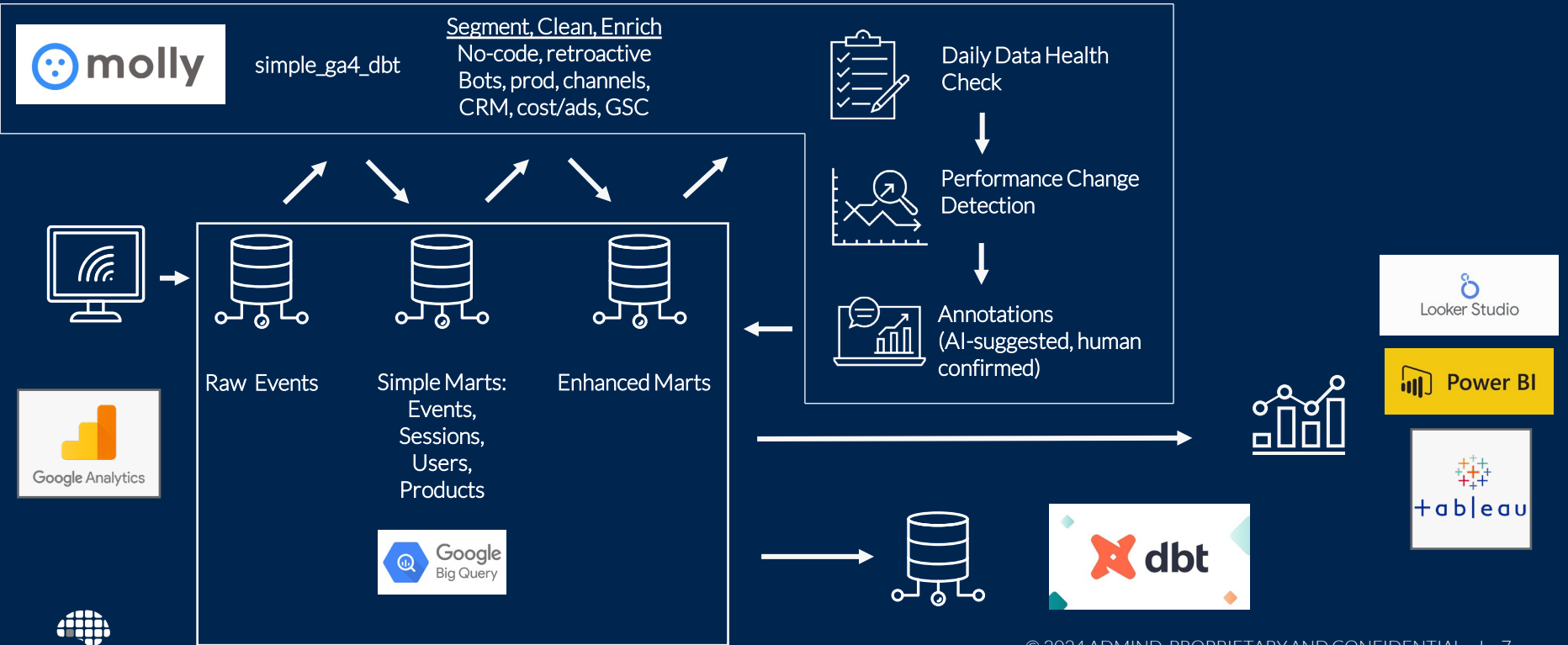
Molly – The Ultimate GA4 Add-On

Currently in Closed Beta – Contact Us If You Are Interested

Molly – The Ultimate GA4 Add-On

simple_ga4_dbt

Segment, Clean, Enrich
No-code, retroactive
Bots, prod, channels,
CRM, cost/ads, GSC

Daily Data Health Check

Performance Change Detection

Annotations (AI-suggested, human confirmed)

Raw Events

Simple Marts: Events, Sessions, Users, Products

Enhanced Marts

Google Big Query

Google Analytics

dbt

Looker Studio

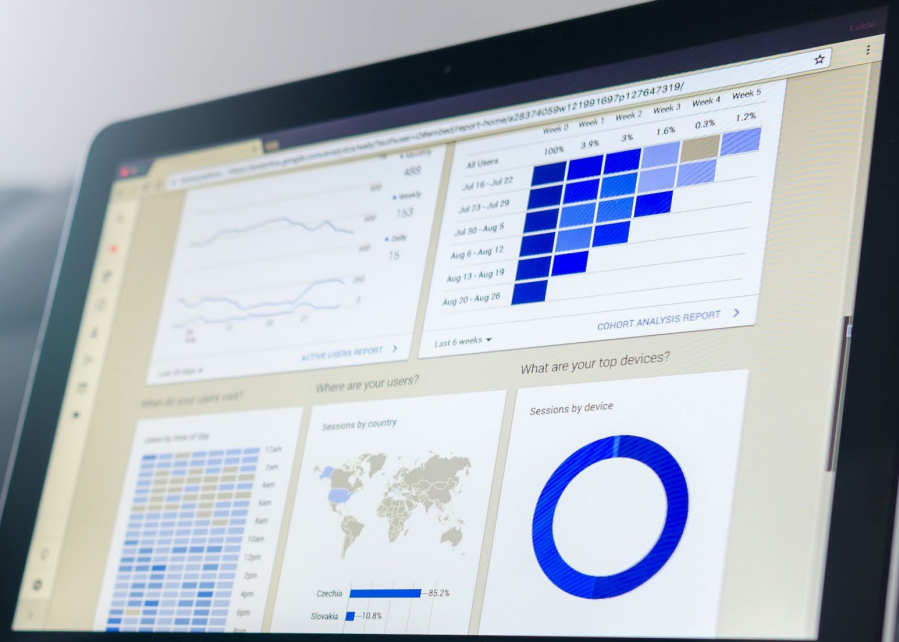Power BI

tableau

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Join the MeasureCamp Convo!!!

WHAT'S THERE

- Request to Join Molly Beta

- Slack

- Slides

- Repos

- Free Instant GA4 Audit Tool

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GA4 Analytics Smells

- Not connected to BQ

- The most effective Direct Traffic Check

- Product Name and Id Consistency Across Events

- Duplicate Transaction Ids

- Dev Traffic In Prod Traffic
    - A better way than IP to handle this

- (not set) campaign for google / cpc

- Not tracking collecting campaign_id

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GA4 Not Connected to BQ

You Probably Already Know…

- It's free in GA4 free. It costs very little if you aren't querying.

- It isn't retroactive, even in GA4360

- How can it happen?
    - Didn't know or see a need

- How to prevent?
    - Just double check now that it is. Turn on streaming – you might just be able to avoid a bill.
    - Also, check for data freshness!
        - Most of the time fixed by disconnecting and reconnecting
        - See Molly Data QA

Failing Audit Results (9)

⚠ New, Direct Visits to Pages Other Than Home Page

What We Look For
Suspiciously high traffic from new, direct visitors to pages other than your index page.

Expected
Less than 3% of traffic should be from new, direct visits not to the homepage.

Your Result
Actual: 7%.

Why It Matters
How would new-to-you visitors come directly to pages other than your home page? Maybe tv/radio/print campa... like a person could remember the URL to type in directly) are a sneaky-good estimate of how often GA4 isn't ge...

How To Fix New, Direct Visits to Pages Other Than Home Page

adMind GA4 Audit: New Dire… ⋮

▶

Explore Your Data

What to Look For in the Data
Look at these links. Which ones would be likely to be typed directly into the URL for new-to-your-site visitors? D...

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Direct Traffic, New Visitors, Other Than "/"

You Probably Already Know...

- Attribution Check Order
    - gclid -> utms -> referrer* -> (direct)

- How can it happen?
    - Missing UTMs (good way to find them)
    - Redirects stripping query params
    - Redirects through https->http->https
    - <meta referrer settings
    - Missing tracking library

- How to prevent?
    - State change detection
    - Threshold on (direct) …. eh

Failing Audit Results (9)

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GA4 Audit: New Dire...

Explore Your Data

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Product Names/Ids Across Events

You Probably Already Know…

- GA4 considers the name/id to be a "compound key"

- How to find?
    - Product Names with more than 1 ID
    - Prod IDs with more than 1 name
    - Greater than 100% conv. rates
    - 0% conv rates

- How can it happen?
    - Most often at PDP to Cart
    - Especially a configurable product

- How to prevent?
    - State change detection on conv. rates
    - Data QA check on "uniqueness"

Failing Audit Results (8)

⊘ Product Name is Associated with Only One Id

What We Look For
The same `item_id` should not be associated with multiple `item_name`s.

Expected
Expecting no more than 0.

Your Result
Actual: 286.

Why It Matters
You're counting events by product incorrectly. You have inaccurate conversion rates between shopping steps (view detail page

How To Fix Product Name is Associated with Only One Id

GA4 Audit: Product …

Explore Your Data

What to Look For in the Data
Look at the first column, which is grouped by `item_id`. The second column will show the multiple names associated with that
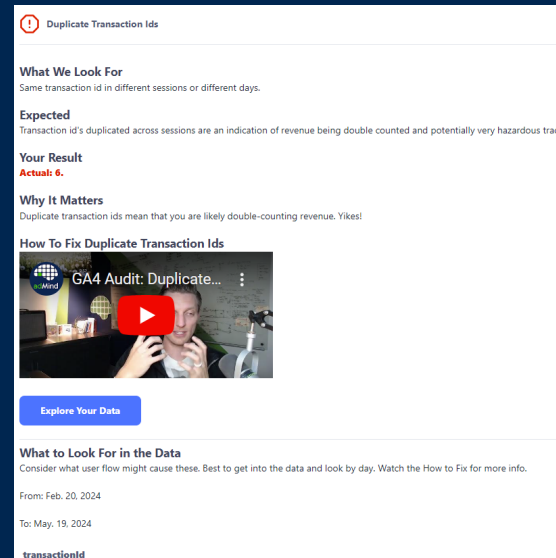
From: Feb. 20, 2024

To: May. 19, 2024

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Duplicate Transaction IDs Across Sessions

You Probably Already Know...

- Double-counting revenue is bad... ☺

- How to find?
    - Sessions with same transaction id (order by session count desc)
    - Better to check event by event (need BQ)

- How can it happen?
    - Most often – txn conf page that reloads for receipt or otherwise and rerenders tracking
        - A client-side approach to prevent the above

- How to prevent?
    - Data QA check on "uniqueness"
    - Remove retroactively (BQ only)

Duplicate Transaction Ids

What We Look For
Same transaction id in different sessions or different days.

Expected
Transaction id's duplicated across sessions are an indication of revenue being double counted and potentially very hazardous track

Your Result
Actual: 6.

Why It Matters
Duplicate transaction ids mean that you are likely double-counting revenue. Yikes!

How To Fix Duplicate Transaction Ids

GA4 Audit: Duplicate...

Explore Your Data

What to Look For in the Data
Consider what user flow might cause these. Best to get into the data and look by day. Watch the How to Fix for more info.

From: Feb. 20, 2024
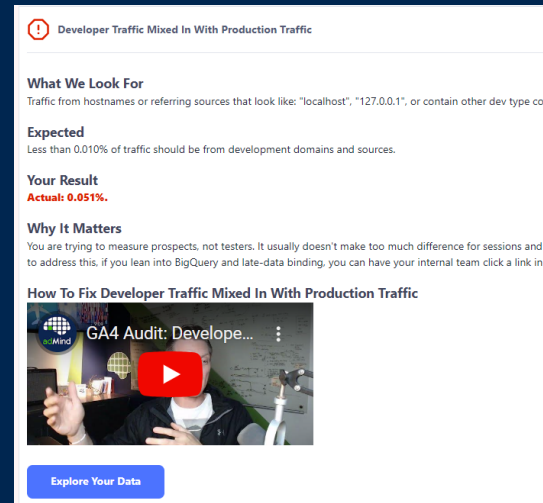
To: May. 19, 2024

transactionId

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Dev Traffic In Prod

You Probably Already Know...

- It usually doesn't matter... until it does ☺

- How to find?
    - Hostnames, protocol, port

- How can it happen?
    - ...

- How to prevent?
    - IP address isn't good enough
    - What if you could send out a link in slack for your team/vendors to click (every few weeks) and then define a retroactive user property...

google / cpc – (not set) campaign

You Probably Already Know...

- Google uses gclid to match campaign from linked GAds

- How to find?
  - google / cpc, campaign (not set)

- How can it happen?
  - Not linked ads account
  - wbraid/gbraid (no gclid)

- How to prevent?
  - G Ads tracking template (need a good one?)
  - Data QA monitor

SECTION

03

THE END

What Did We Miss?

WHAT'S THERE

- Slack
- Slides
- Repos
- Free Instant GA4 Audit
    - >70 other common checks

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