Best Practice mit BigQuery

NIKO SPIES
Mehr Umsatz für Online-Shops

VARIFY.iO®

NIKO SPIES

Mehr Umsatz für Online-Shops

- E-Commerce Einstieg 2019 mit eigenem Shop
- CRO Experte für Startups und Mittelständler
- Einblicke in >200 Shops

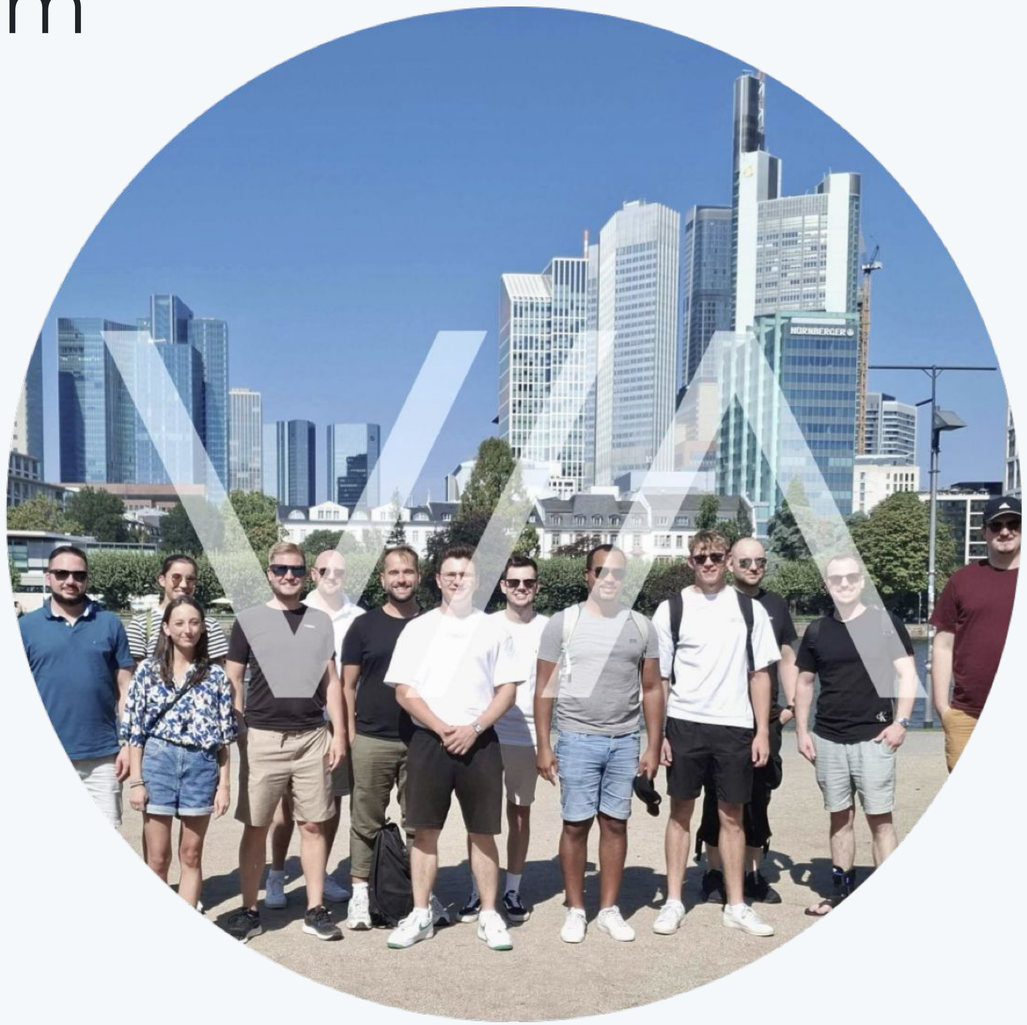
Eshop Guide
E-Commerce einfach gemacht.

konversionsKRAFT
Zertifizierung zum
Conversion Manager

Petromax ONGLE24 KÄLTE BRINGER BRINGER SCHUBACK Parfümerien WireStyle FASHION DRINKS weihnachtsplaner

VARIFY.iO® - A/B Testing Platform

- Unlimited Traffic
- No Cookies
- Single Source of Truth
- Shopify & Big Query Integration



OMR REVIEWS TOP RATED CONVERSION OPTIMIZATION Q1/25

MADE & HOSTED IN GERMANY

CARGLASS® DUDEN ELLE NIVEA FOCUS ESN® ELITE SPORTS NUTRITION

Darum geht es heute:

- **Einführung: Was ist BigQuery überhaupt?**
- **Praxisbeispiel: A/B-Tests**
- **Wie ich mit BigQuery arbeite**
- **Tipps & Tools aus der Praxis**
- **Verbindung GA4 ↔ BigQuery**

Einführung

Was ist BigQuery?

- **BigQuery ist ein Cloud-basiertes Data Warehouse von Google**
  → speichert und analysiert sehr große Datenmengen (z. B. GA4-Rohdaten)

- **Ermöglicht es, große Datenmengen (z. B. GA4-Daten) blitzschnell per SQL auszuwerten**
  → eigene Fragen an die Daten stellen – ohne Einschränkungen durch vordefinierte Reports

- **Ideal für eigene Analysen, A/B-Testing und datengetriebenes Arbeiten**
  → Nutzung für individuelle Analysen, Segmentierungen, Testauswertungen und Reporting

Wie kommen Daten in BigQuery?

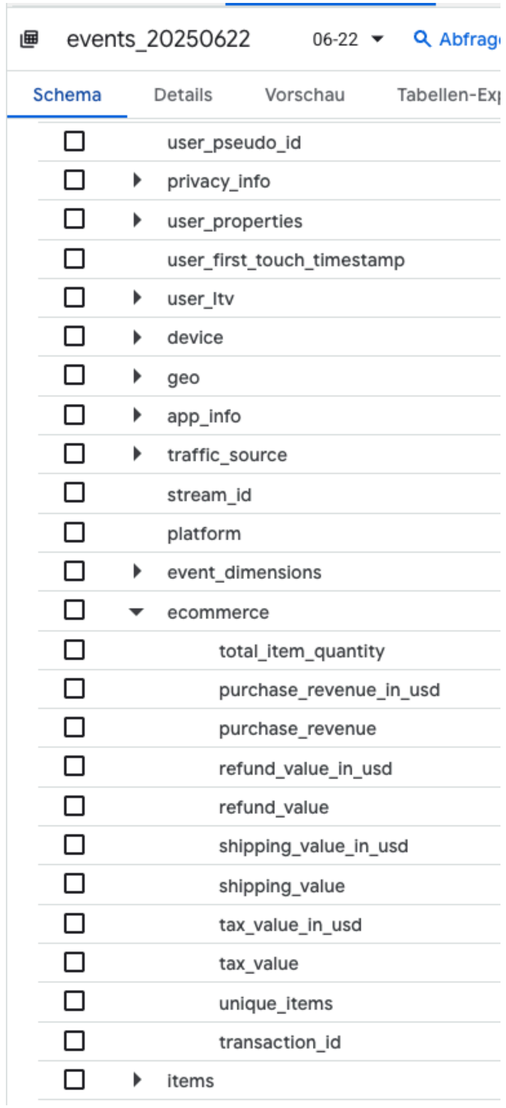
- **Automatisch aus GA4 exportiert**
  → per aktivierter BigQuery-Verknüpfung in den GA4-Property-Einstellungen

- **GA4-Rohdaten-Export (automatisch)**
  → die in GA4 erfassten Events werden 1:1 als Rohdaten in BigQuery gespeichert
  → Beispiel: ein Klick auf „In den Warenkorb“ wird als einzelnes Event mit Zeitstempel, User ID usw. gespeichert

- **Zusätzlich eigene Datenquellen möglich**
  → z. B. CRM, Shop, Logfiles, APIs, CSV/Excel

- **Eigene Daten flexibel importieren**
  → per API, Datei-Upload oder Zeitplan (Scheduled Jobs)

Events in BigQuery



Vorteile und unterschiede zu GA4 Daten

- **Spezielle Tests und Kombinationen möglich**
  → z. B. Nutzer in Verbindung mit bestimmten Events oder Verhaltensmustern analysieren

- **Beliebig lange Zeiträume analysierbar**
  → in BigQuery speicherst du die Daten selbst — kein 14-Monats-Limit wie in GA4

- **Keine Sampling-Probleme**
  → auch bei langen Testläufen oder kleinen Segmenten sind alle Daten verfügbar. Keine Hochrechnungen.

- **Daten gesichert & exportierbar**
  → Rohdaten dauerhaft in BigQuery gespeichert, jederzeit downloadbar

Vorteile und unterschiede zu GA4 Daten

<u>Unterschiede zu GA4 direkt:</u>

- GA4 Standard-Speicherung: 2 bis 14 Monate je nach Einstellung
  → Funnel- und Exploration-Daten (z. B. Segmente, Verhaltensflows) sind nach Ablauf gelöscht

- BigQuery Sandbox: 60 Tage Tabellenlaufzeit — Upgrade für dauerhaftes Speichern möglich (geringe Kosten)

- BigQuery bietet volle Datenhoheit
  → keine Abhängigkeit von der Retention-Einstellung in GA4. Daten können exportiert werden.

Das kostet Big Query

- **Kostenloses Kontingent inklusive**
  → bis 10 GB Speicher und 1 TB Abfragen pro Monat gratis

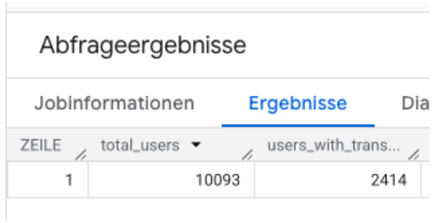
- **Benachrichtigungen bei Limits möglich**
  → automatische E-Mail-Warnungen bei Speicher- oder Abfragegrenzen einstellbar

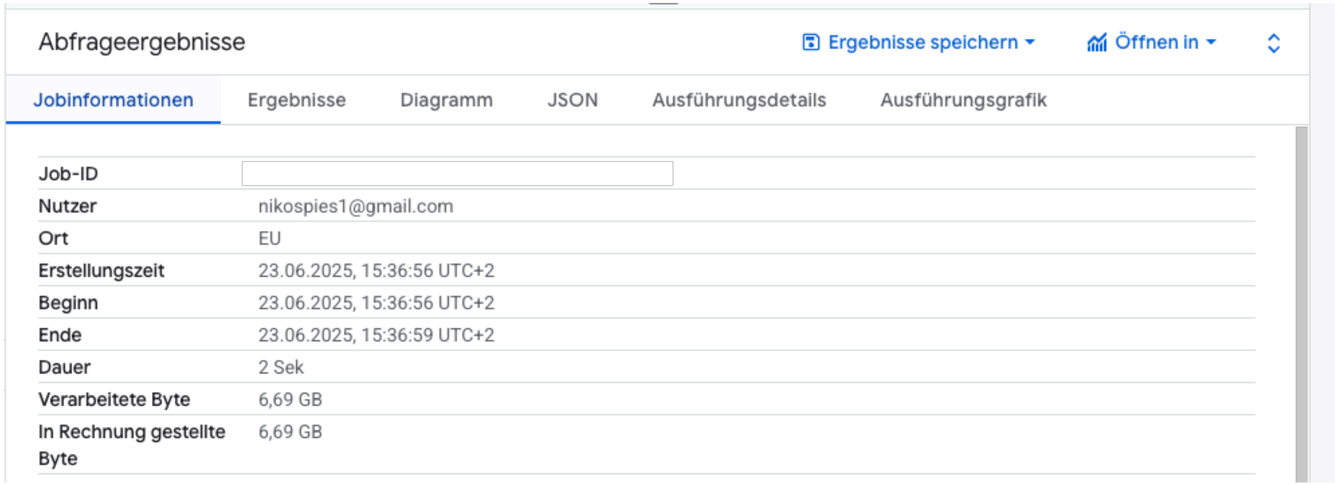
- **Abrechnung nach tatsächlicher Nutzung**
  → nur was gespeichert oder abgefragt wird, wird berechnet (kein Fixpreis)

- **Keine Angst vor Kostenfallen**
  → man sieht im Google Cloud-Konto jederzeit die aktuelle Nutzung

Abfrage A/B Test & Datenmenge

- Test lief 45 Tage
- Abfrage 6,7 GB
- Diese Abfrage könnte ich 150x machen um 1 TB zu verbrauchen





Beispielrechnung Kontingent

- Annahme: Shop mit 100.000 Nutzern & 1.500 Käufen pro Monat
  → ca. 10–15 Events pro Nutzer → ca. 1,5 Mio. Events / Monat

x 100.000

x 1.500

- Datengröße: ca. 1 KB pro Event (GA4-Events mit Standard-Daten + Custom Dimensions)
  → 1,5 Mio. Events × 1 KB = ca. 1,5 GB pro Monat

Beispielrechnung Kontingent

x 100.000

x 1.500

- **Kostenloses Kontingent: 10 GB Speicher**
- Ergebnis: nach ca. 6–7 Monaten wäre das Free-Tier (10 GB) erreicht
- Danach: jeder weitere GB kostet nur ca. 0,02 USD / Monat
  → Beispiel: bei 15 GB Speicher = ca. 0,10 € / Monat

Beispielrechnung Kontingent

x 100.000

x 1.500

- **Abfrage-Kontingent: 1 TB pro Monat kostenlos**
- Beispiel: Abfrage mit 6,7 GB (siehe vorherige Folie)
  → ca. 150 Abfragen pro Monat kostenlos
- In der Praxis: bei typischen A/B-Tests und Analysen bleibt man fast immer im Free-Tier
  → bei 5 - 10 Testauswertungen pro Monat → meist deutlich unter dem 1 TB Limit

Praxisbeispiele

Was ist SQL?

- **Sprache für Datenabfragen**
  → mit SQL kann man aus einer Datenbank gezielt Informationen herausholen

- **In BigQuery nutze ich SQL, um GA4-Daten auszuwerten**
  → z. B. wie oft wurde etwas gekauft, welche Nutzergruppe hat besser performt

- **Kleine Befehle – große Wirkung**
  → mit wenigen Zeilen SQL kann ich eigene Reports und Analysen erstellen

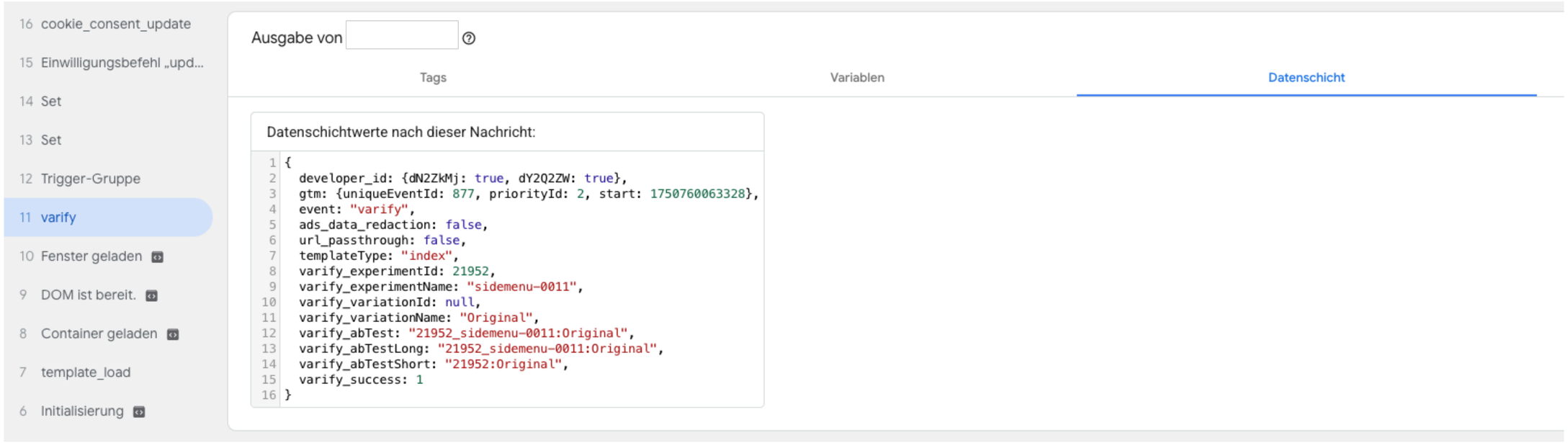
Grundlagen um Tests auswerten zu können

- **GA4-Tracking vollständig und sauber eingerichtet**
  → z. B. Purchase-Event, alle wichtigen Events kommen in GA4 an
  → Consent-Banner korrekt eingebunden und eingestellt

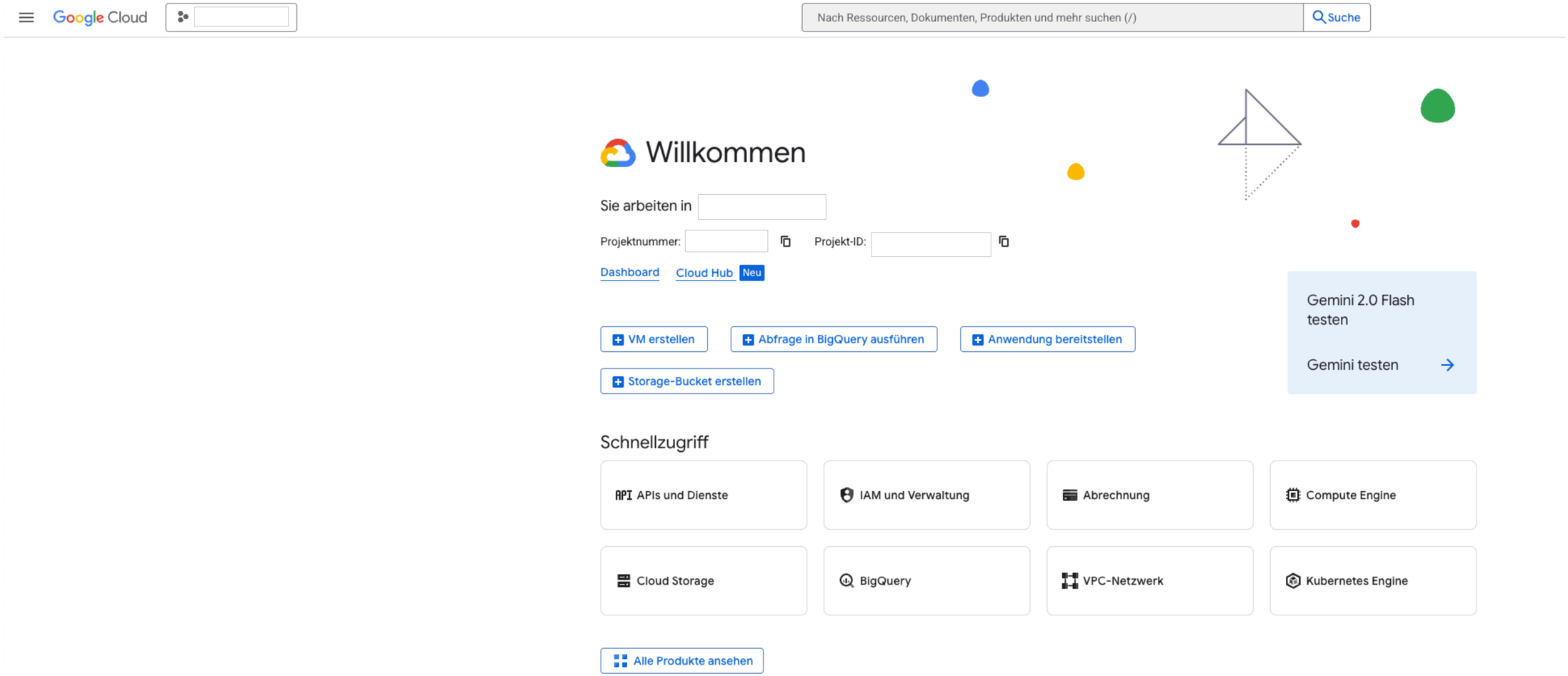
- **Testing-Tool integriert und Events im GTM erfasst**
  → das Testing-Tool sendet relevante Events (z. B. „Testing Tool Event“) an GA4

- **Testing-Events enthalten eindeutige Informationen**
  → z. B. „experiment_id“ und „variant_name“ im Event → damit die Testgruppen später sauber ausgewertet werden können

Grundlagen um Tests auswerten zu können



Wo können wir abfragen?



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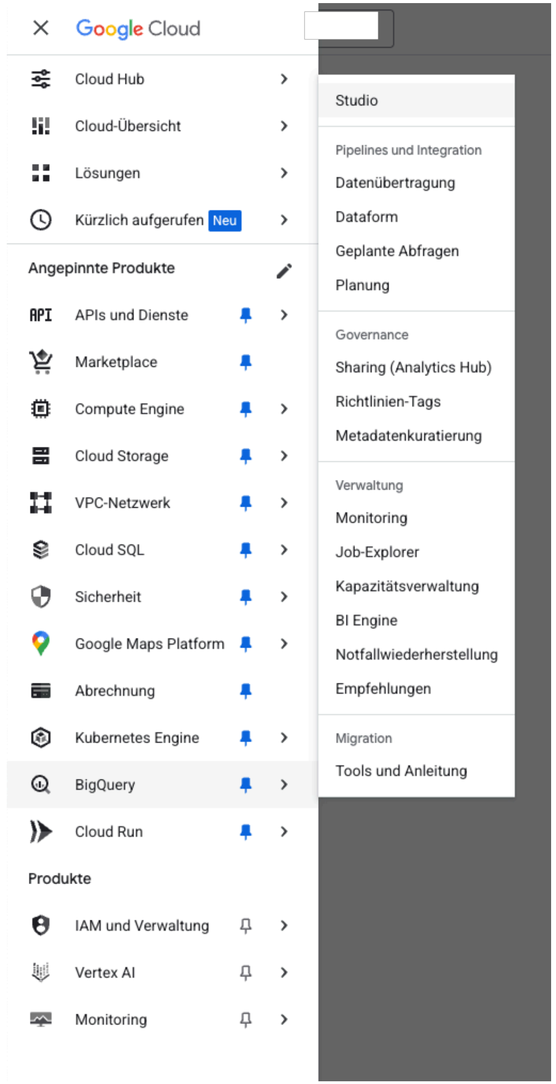

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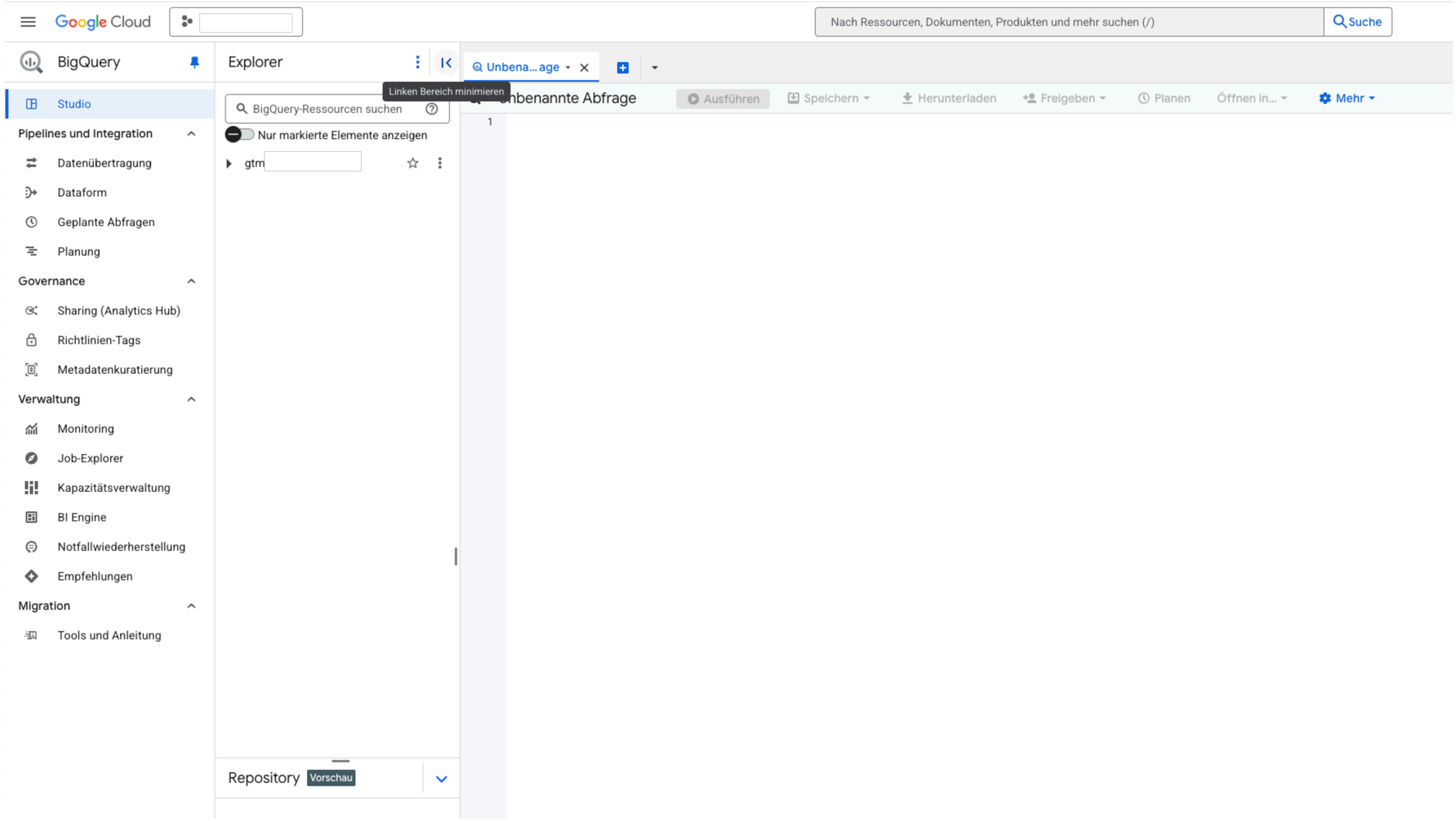

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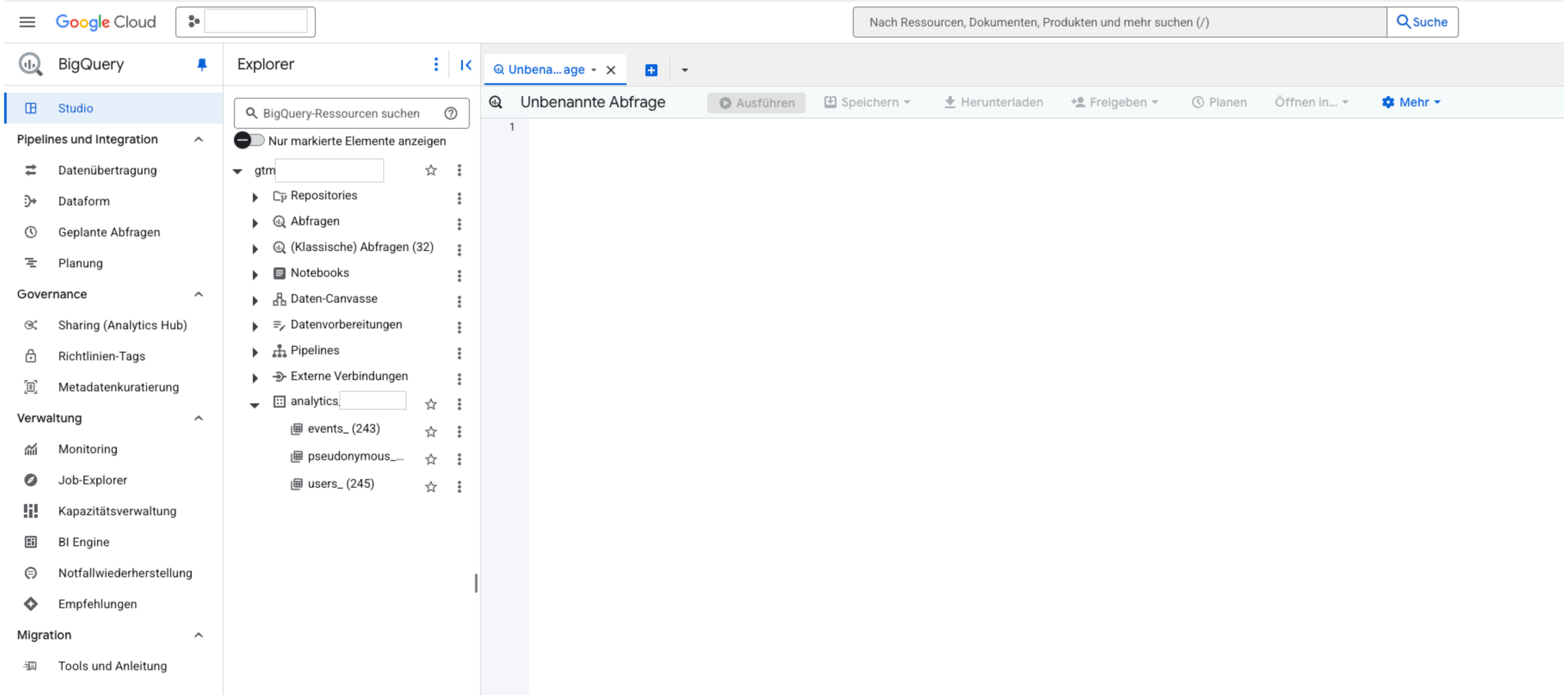
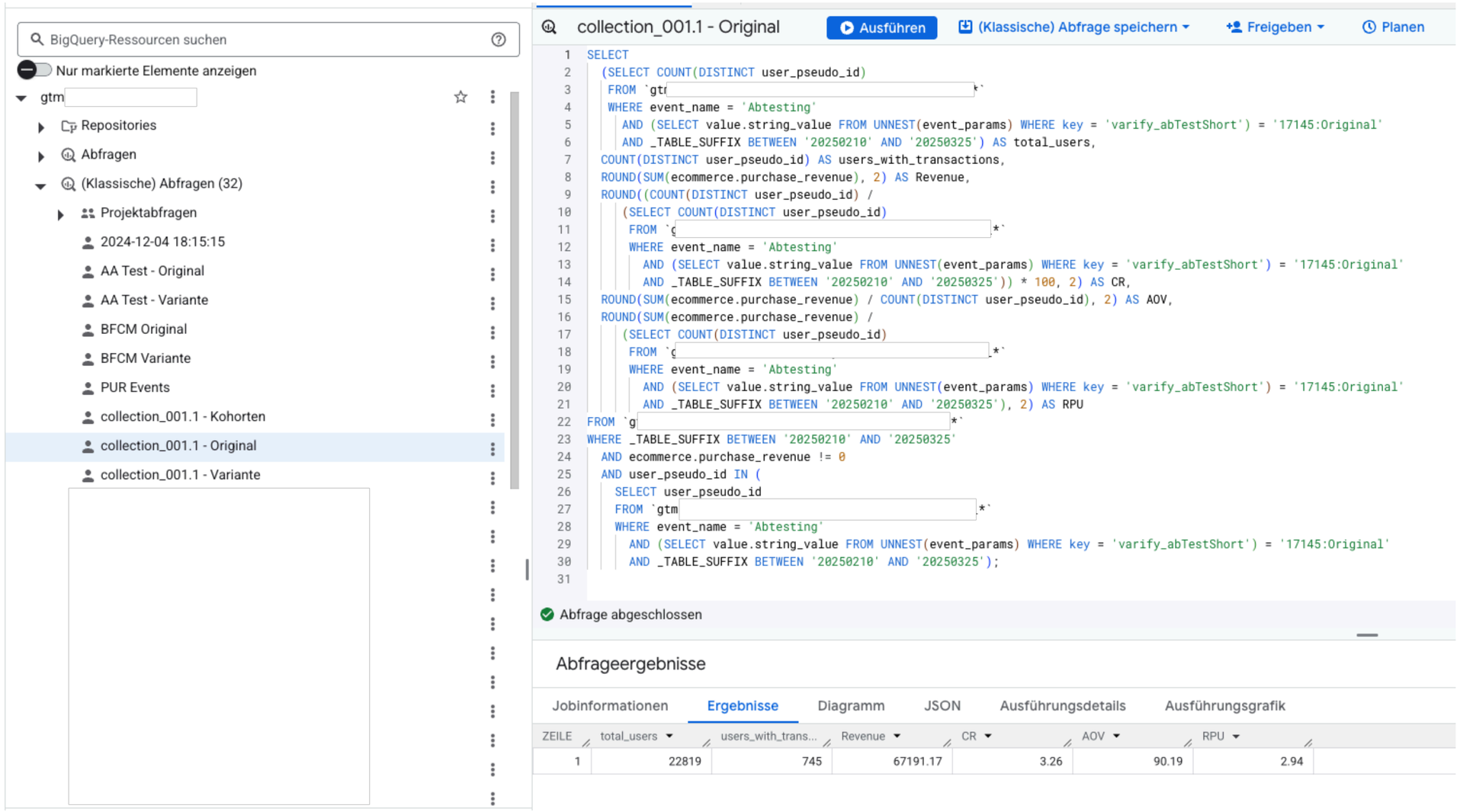
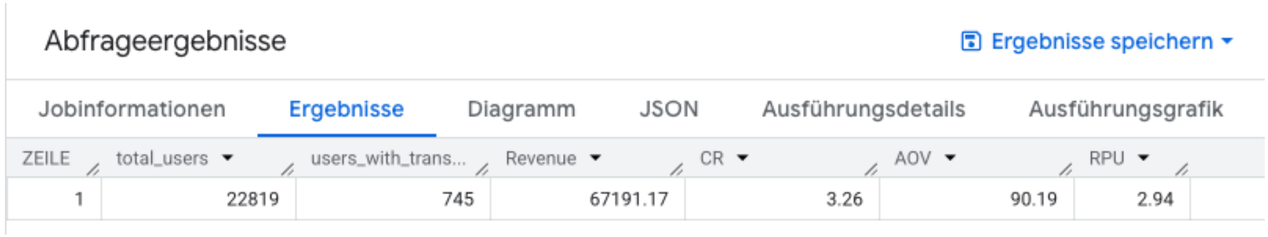


Wo können wir abfragen?



So werte ich Tests aus

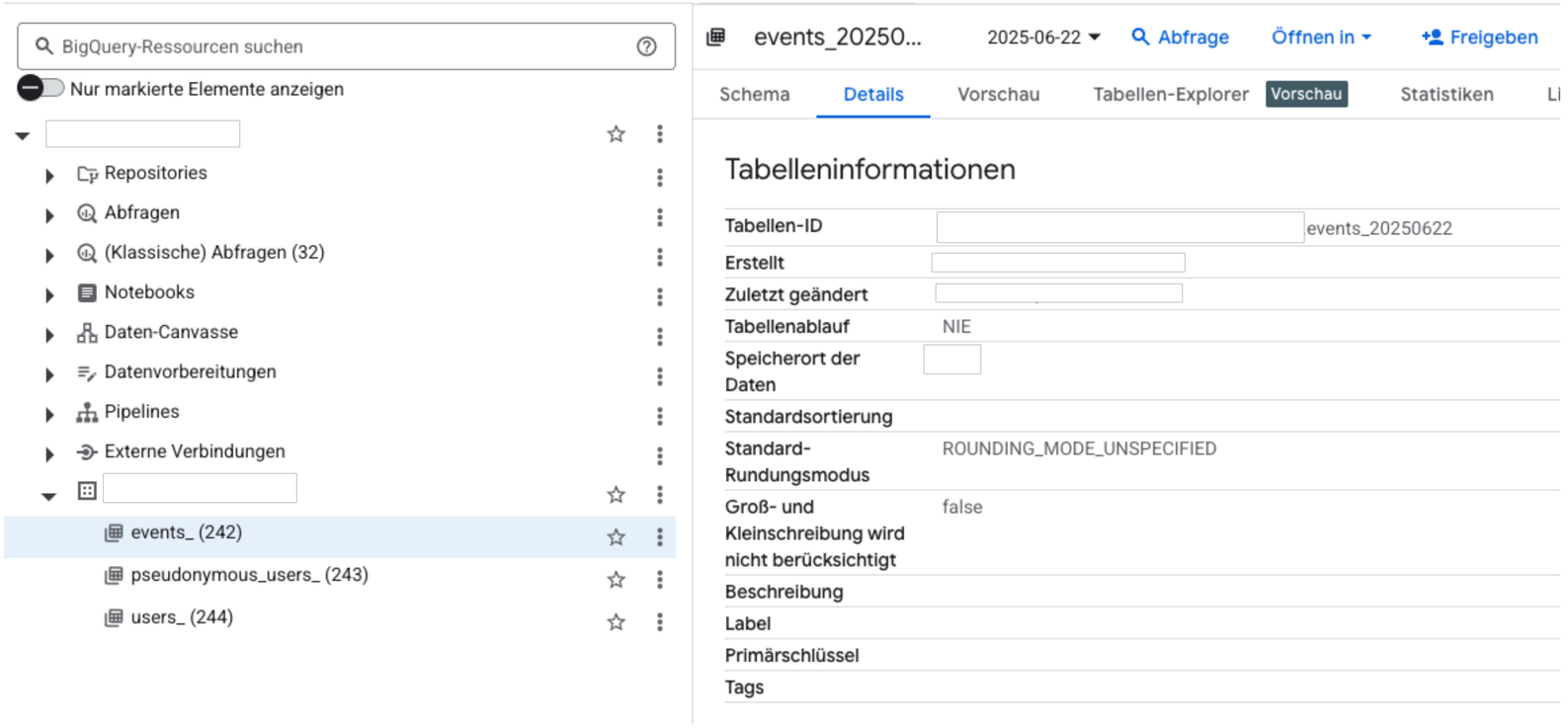
```sql
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,
  COUNT(DISTINCT user_pseudo_id) AS users_with_transactions,
  ROUND(SUM(ecommerce.purchase_revenue), 2) AS Revenue,
  ROUND((COUNT(DISTINCT user_pseudo_id) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,
  ROUND(SUM(ecommerce.purchase_revenue) / COUNT(DISTINCT user_pseudo_id), 2) AS AOV,
  ROUND(SUM(ecommerce.purchase_revenue) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `TABELLEN ID`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'), 2) AS RPU
FROM `gtm-123456789.analytics_123456789.events_*`
WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `gtm-123456789.analytics_123456789.events_*`
    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND ,20250325');
```



ZEILE	total_users	users_with_trans...	Revenue	CR	AOV	RPU
1	22819	745	67191.17	3.26	90.19	2.94

So werte ich Tests aus

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `TABELLEN ID`
```



- Wir zählen alle Nutzer im Test
- Wir filtern die Eventquelle
- Wir filtern den Zeitraum
- Wir filtern den Test
- Wir filtern das Event

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,

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  ROUND((COUNT(DISTINCT user_pseudo_id) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,

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      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'), 2) AS RPU

FROM `gtm-123456789.analytics_123456789.events_*`

WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `gtm-123456789.analytics_123456789.events_*`
    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');
```

total_users → Anzahl aller User im Test

- Wir zählen Käufer
- Wir summieren Umsatz

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,

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     (SELECT COUNT(DISTINCT user_pseudo_id)
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      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,

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  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
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    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');
```

users_with_transactions → Anzahl der Käufer

purchase_revenue → Gesamtumsatz im Testzeitraum

- Wir berechnen die CR
- Wir berechnen den AOV

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,

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      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
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FROM `gtm-123456789.analytics_123456789.events_*`

WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
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      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');
```

AOV (Average Order Value) → Umsatz geteilt durch Anzahl der Käufer (nur User mit Käufen)

- Wir berechnen den RPU

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,

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     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,

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FROM `gtm-123456789.analytics_123456789.events_*`

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  AND ecommerce.purchase_revenue != 0
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    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');
```

RPU (Revenue per User) → Umsatz geteilt durch alle User im Test (auch ohne Kauf)

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
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     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,

  ROUND(SUM(ecommerce.purchase_revenue) / COUNT(DISTINCT user_pseudo_id), 2) AS AOV,

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     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'), 2) AS RPU
```
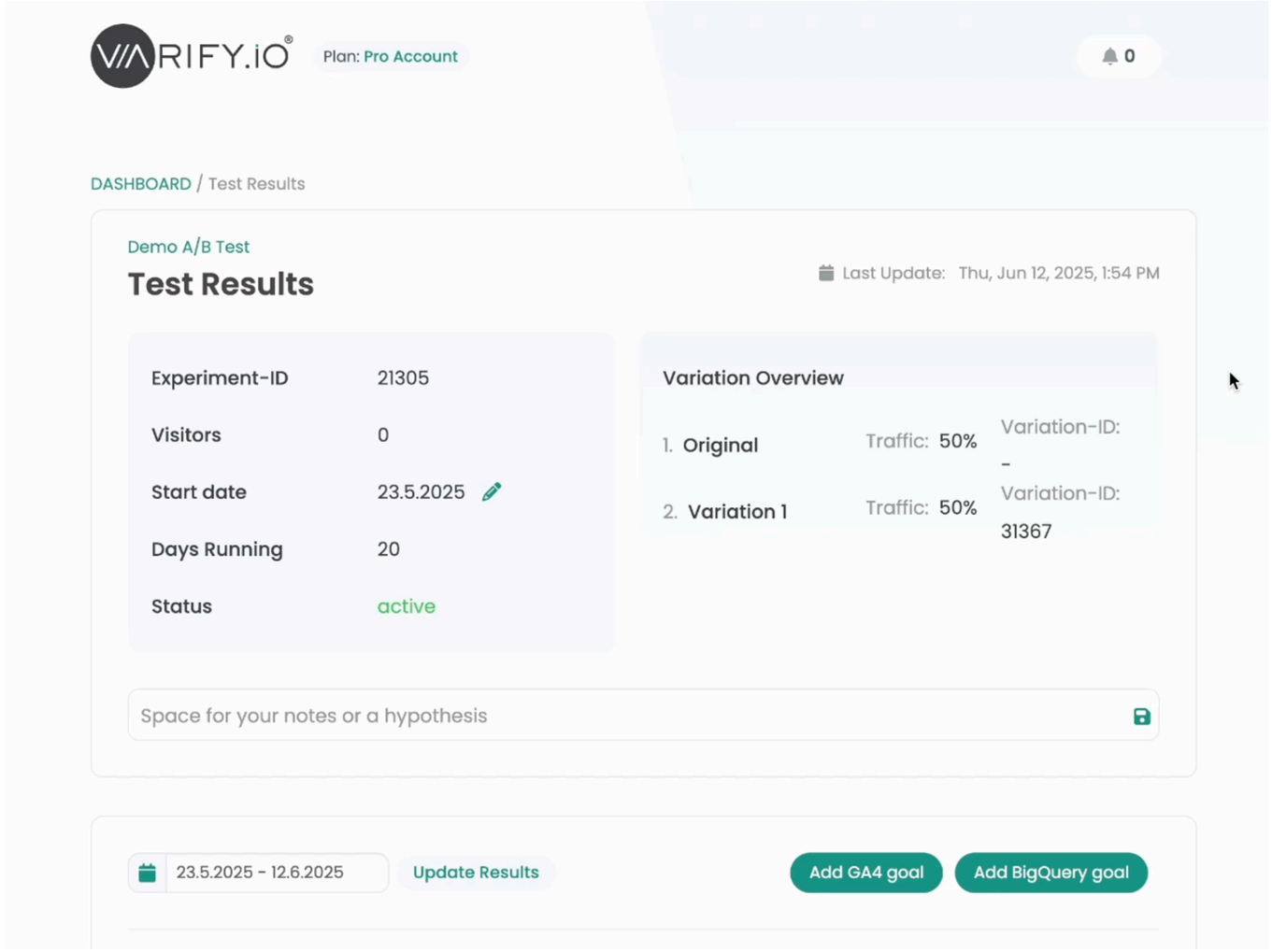

- Wir filtern 0€ Käufe raus

```
FROM `gtm-123456789.analytics_123456789.events_*`

WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `gtm-123456789.analytics_123456789.events_*`
    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');
```

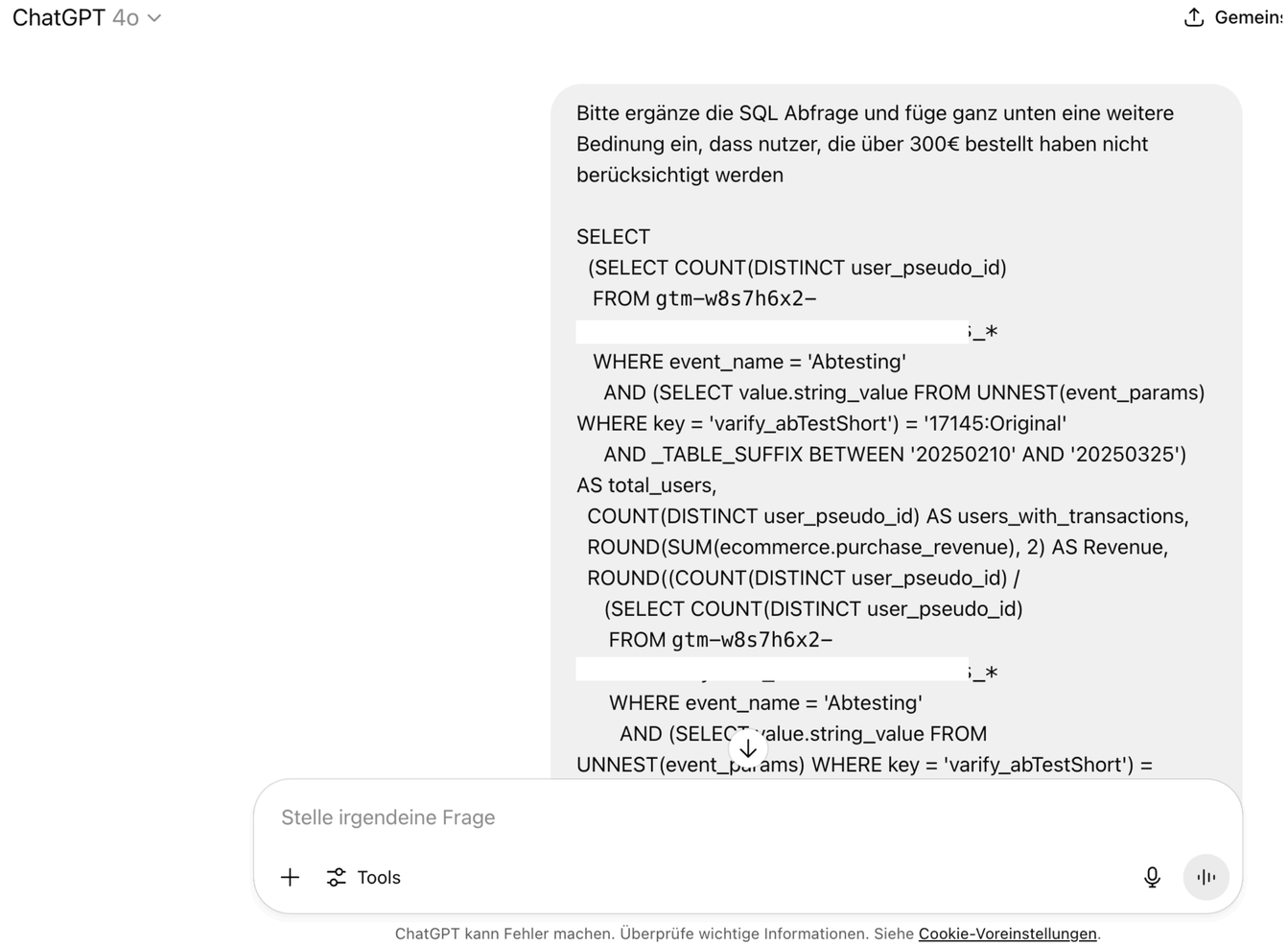
Skripte zum Anpassen

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,

  COUNT(DISTINCT user_pseudo_id) AS users_with_transactions,

  ROUND(SUM(ecommerce.purchase_revenue), 2) AS Revenue,

  ROUND((COUNT(DISTINCT user_pseudo_id) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,

  ROUND(SUM(ecommerce.purchase_revenue) / COUNT(DISTINCT user_pseudo_id), 2) AS AOV,

  ROUND(SUM(ecommerce.purchase_revenue) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `gtm-123456789.analytics_123456789.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'), 2) AS RPU

FROM `gtm-123456789.analytics_123456789.events_*`

WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `gtm-123456789.analytics_123456789.events_*`
    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');
```

Beispiel: Safe Space



Es braucht kein IT Studium!



Es braucht kein IT Studium!

Hier ist deine ergänzte Abfrage.

Ich habe ganz unten eine weitere Bedingung eingefügt, die nur Nutzer mit einer **Gesamtbestellsumme ≤ 300 €** berücksichtigt:

sql — Kopieren — Bearbeiten

```sql
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `                                    47.events_*`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestS
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,
  COUNT(DISTINCT user_pseudo_id) AS users_with_transactions,
  ROUND(SUM(ecommerce.purchase_revenue), 2) AS Revenue,
  ROUND((COUNT(DISTINCT user_pseudo_id) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
      FROM `                                    47.events_*`
      WHERE event_name = 'Abtesting'
        AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTe
        AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,
  ROUND(SUM(ecommerce.purchase_revenue) / COUNT(DISTINCT user_pseudo_id), 2) AS AOV,
  ROUND(SUM(ecommerce.purchase_revenue) /
     (SELECT COUNT(DISTINCT user_pseudo_id)
```

Es braucht kein IT Studium!

collection_001.1 - Original

Ausführen | (Klassische) Abfrage speichern | Freigeben | Planen

```sql
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-                                    *`
   WHERE event_name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
     AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325') AS total_users,
  COUNT(DISTINCT user_pseudo_id) AS users_with_transactions,
  ROUND(SUM(ecommerce.purchase_revenue), 2) AS Revenue,
  ROUND((COUNT(DISTINCT user_pseudo_id) /
    (SELECT COUNT(DISTINCT user_pseudo_id)
     FROM `g                                      `
     WHERE event_name = 'Abtesting'
       AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
       AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325')) * 100, 2) AS CR,
  ROUND(SUM(ecommerce.purchase_revenue) / COUNT(DISTINCT user_pseudo_id), 2) AS AOV,
  ROUND(SUM(ecommerce.purchase_revenue) /
    (SELECT COUNT(DISTINCT user_pseudo_id)
     FROM `g                                      `
     WHERE event_name = 'Abtesting'
       AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
       AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'), 2) AS RPU
FROM `g                                         *`
WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `g                                      *`
    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325');

```

Diese Abfrage verarbeitet bei der Ausführung 2,02 GB.

Abfrageergebnisse

Jobinformationen | Ergebnisse | Diagramm | JSON | Ausführungsdetails | Ausführungsgrafik

ZEILE	total_users	users_with_trans...	Revenue	CR	AOV	RPU
1	22819	745	67191.17	3.26	90.19	2.94

Unbenannte Abfrage

Ausführen | Speichern | Herunterladen | Freigeben | Planen

```sql
  ROUND(SUM(ecommerce.purchase_revenue) /
    (SELECT COUNT(DISTINCT user_pseudo_id)
     FROM `g                                      `
     WHERE event_name = 'Abtesting'
       AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
       AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'), 2) AS RPU
FROM `g                                         *`
WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  AND ecommerce.purchase_revenue != 0
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `g                                      `
    WHERE event_name = 'Abtesting'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '17145:Original'
      AND _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
  )
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM (
      SELECT user_pseudo_id, SUM(ecommerce.purchase_revenue) AS total_revenue
      FROM `g                                      `
      WHERE _TABLE_SUFFIX BETWEEN '20250210' AND '20250325'
        AND ecommerce.purchase_revenue != 0
      GROUP BY user_pseudo_id
    )
    WHERE total_revenue <= 300
  );

```

Abfrage abgeschlossen

Abfrageergebnisse

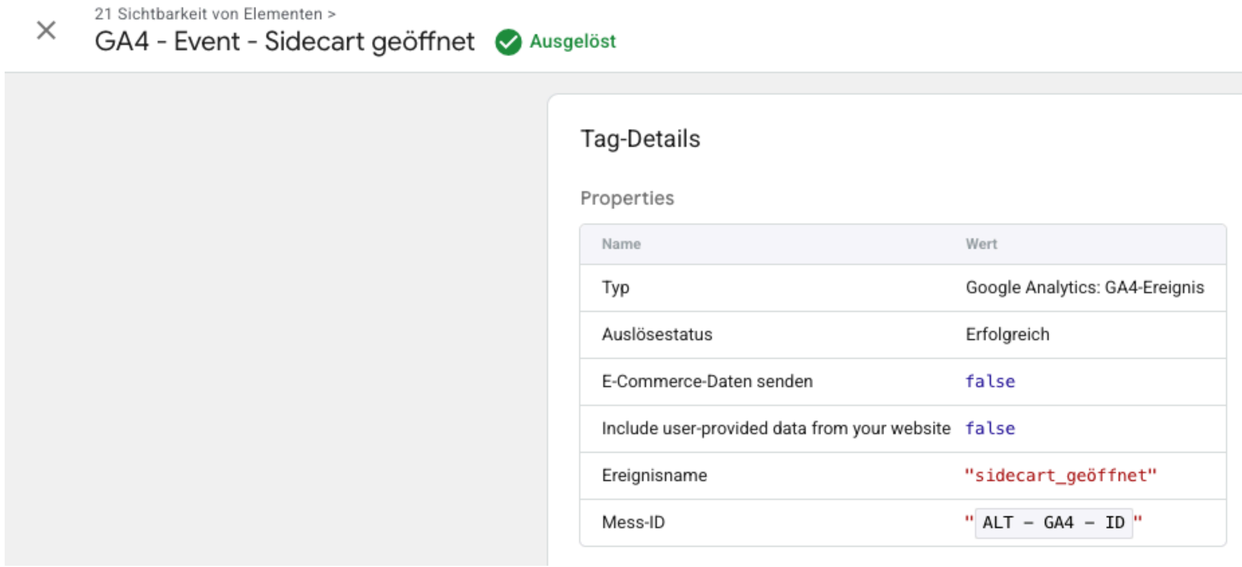
Jobinformationen | Ergebnisse | Diagramm | JSON | Ausführungsdetails | Ausführungsgrafik

ZEILE	total_users	users_with_trans...	Revenue	CR	AOV	RPU
1	22819	723	57764.1	3.17	79.9	2.53

Nutzung von Events aus dem GTM

- Bei A/B-Tests gibt es oft wichtige Events, die in der Auswertung aber vergessen werden
- Beispiel: wenn ich im Sidecart teste, muss ich wissen → wurde der Sidecart überhaupt geöffnet?
- Solche Events können über den Google Tag Manager erstellt und an GA4 gesendet werden
  → z. B. Event „sidecart geöffnet“
  → z. B. Event „all search open“
- In BigQuery kann ich diese Events später in der Abfrage nutzen
  → als Filter oder Segment → z. B. nur Nutzer auswerten, die den Sidecart geöffnet haben
- Jedes Event kann als Zusatz-Filter genutzt werden
  → wichtig: es muss im GTM sauber angelegt und korrekt gefeuert werden

Nutzung von Events aus dem GTM



Nutzung von Events aus dem GTM

```
SELECT
  (SELECT COUNT(DISTINCT user_pseudo_id)
   FROM `gtm-123456789.analytics_123456789.events_*`
   WHERE event_Name = 'Abtesting'
     AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'varify_abTestShort') = '14767:Original'
     AND _TABLE_SUFFIX BETWEEN '20241212' AND '20250121'
     AND user_pseudo_id IN (
       SELECT user_pseudo_id
       FROM `gtm-123456789.analytics_123456789.events_*`
       WHERE event_name = 'sidecart_geöffnet'
         AND _TABLE_SUFFIX BETWEEN '20241212' AND '20250121')) AS total_users,
```

Mein Workflow

Mein Workflow

1. Testplanung 
2. Testvorbereitung 
3. Test-Implementierung 
4. Kontrolle / BigQuery Abfragen aufsetzen 
5. Auswertung Kohorten, Segmente usw. 

Spezielle Abfragen

```
SELECT
  user_pseudo_id,
  ROUND(SUM(ecommerce.purchase_revenue), 2) AS Purchase_Revenue,
  MAX(ecommerce.transaction_id) AS Transaction_ID,
  FORMAT_DATETIME('%T', DATETIME(TIMESTAMP_MICROS(event_timestamp), 'Europe/Berlin')) AS Berlin_Time
FROM `cg-sky-12345.123456.events_*`
WHERE _TABLE_SUFFIX BETWEEN '20231128' AND '20231128'
  AND ecommerce.purchase_revenue != 0
  AND ecommerce.purchase_revenue > 60
  AND user_pseudo_id IN (
    SELECT user_pseudo_id
    FROM `cg-sky-12345.123456.events_*`
    WHERE event_name = 'ablyft_abtest'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'experiment_name') = 'test_cart_002'
      AND (SELECT value.string_value FROM UNNEST(event_params) WHERE key = 'variation_name') = 'Variation #1'
      AND _TABLE_SUFFIX BETWEEN '20231128' AND '20231128'
      AND user_pseudo_id IN (
        SELECT user_pseudo_id
        FROM `cg-sky-12345.123456.events_*`
        WHERE event_name = 'sidecart_geöffnet'
          AND _TABLE_SUFFIX BETWEEN '20231128' AND '20231128'
      )
  )
GROUP BY user_pseudo_id, event_timestamp
ORDER BY Berlin_Time;
```

Spezielle Abfragen

- Andere Software: ablyft
- Andere Parameter zum Abfragen
- Kürzere Abfrage weil es keine Berechnungen gibt

Tipps & Tools aus der Praxis

ChatGPT als SQL-Assistent

- Ich nutze ChatGPT oft als Hilfe beim Schreiben von SQL-Abfragen

- ChatGPT hilft bei:
  → Syntax und Aufbau von Abfragen
  → Umwandeln von Ideen in SQL
  → Optimieren und Erklären von bestehenden Queries

- Besonders praktisch für komplexere Fragen und Filterlogik
  → spart viel Zeit beim Erstellen und Anpassen von Queries

- Ich habe ein BigQuery Projekt und arbeite dort mit einem GBT das SQL Profi ist

Looker Studio

- Wird oft genutzt, um BigQuery-Daten in Dashboards zu visualisieren
- Für A/B-Tests kann man z. B. eigene Test-Dashboards bauen
  → z. B. Käufe pro Variante im Zeitverlauf anzeigen
- Ich selbst nutze es aktuell nicht — weil ich die Auswertung direkt in BigQuery / SQL mache.
- Muss eingestellt werden, dass Daten nicht die ganze Zeit synchronisiert!

Looker Studio

Looker Studio

Experiment ID: 11110 (1)

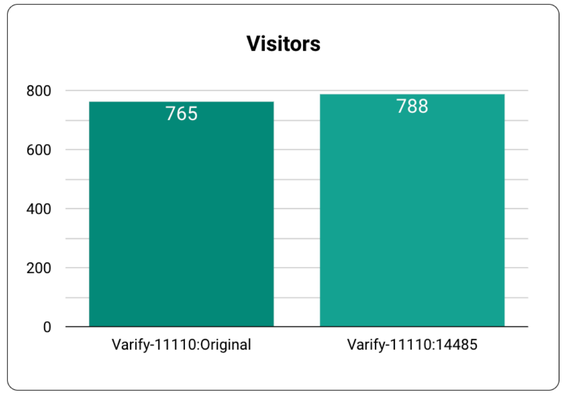
Event Name: page_view (1)

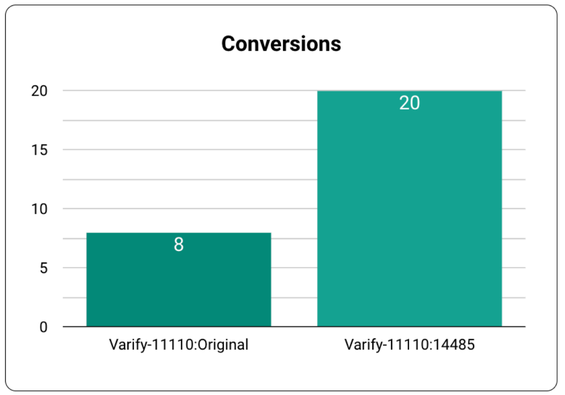
01.01.2024 - 31.12.2024

Varify.io BigQuery Looker Studio Dashboard

Varify experiment data is based on BigQuery data. The statistical calculation of significance is conducted using a two-sided Chi-Square test. The significance calculation is only valid if the number of conversions is less than the number of visitors. It is not applicable for revenue values. Improvements and significance calculations are always made in comparison to the original.

		Visitors	Conversions	Conversion Rate	Improvement	Confidence	Significance
1.	Varify-11110:Original	765	8	1.05%	-	-	Nicht signifikant
2.	Varify-11110:14485	788	20	2.54%	142.70%	97%	Signifikant (p < 0....





Safe spaces

	Visitors	Conversions	Conversion Rate	Improvement	Confidence	Significant
Original	84,895	1,730	2.04%	-	-	-
Variation 1	84,897	1,790	2.11%	4.46	83.8%	No

No statistically significant differences were found.
Please continue testing to ensure a sufficient sample size.

Goal 3: **Add to carts** GA4

	Visitors	Conversions	Conversion Rate	Improvement	Confidence	Significant
Original	84,698	6,314	7.45%	-	-	-
Variation 1	84,717	6,754	7.97%	6.94%	100.0%	Yes

Goal 4: **Add to carts (count)** Big Query

	Visitors	Conversions	Conversion Rate	Improvement	Confidence	Significant
Original	84,895	6,340	7.47%	-	-	-
Variation 1	84,897	6,790	7.99%	7.27%	100.0%	Yes

Goal 5: **Abtesting** GA4

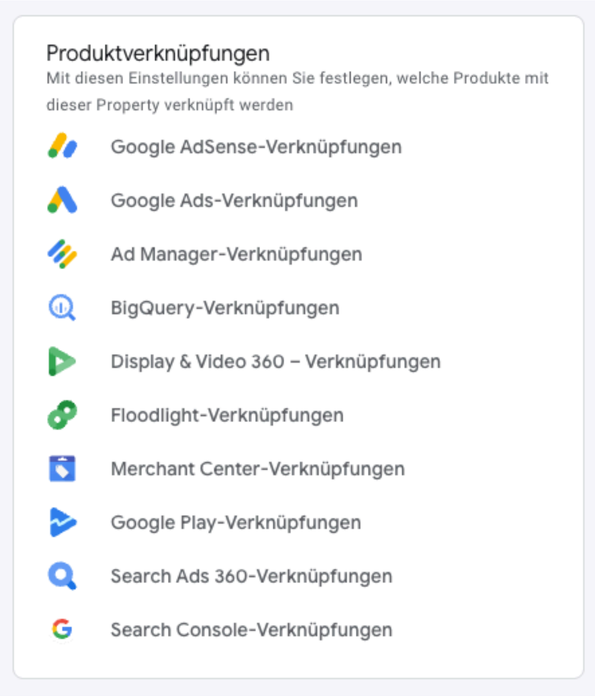
	Visitors	Event Count	Conversion Rate	Improvement	Confidence	Significant
Original	84,698	84,662	99.96%	-	-	-
Variation 1	84,717	84,687	99.96%	0.01%	77.0%	No

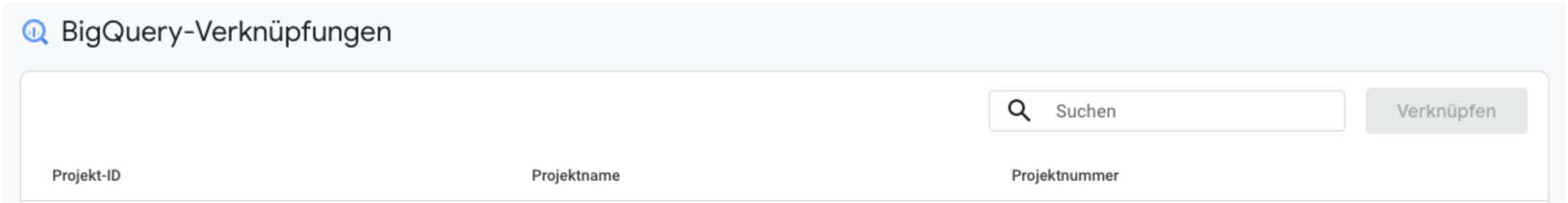
No statistically significant differences were found.
Please continue testing to ensure a sufficient sample size.

BigQuery Access

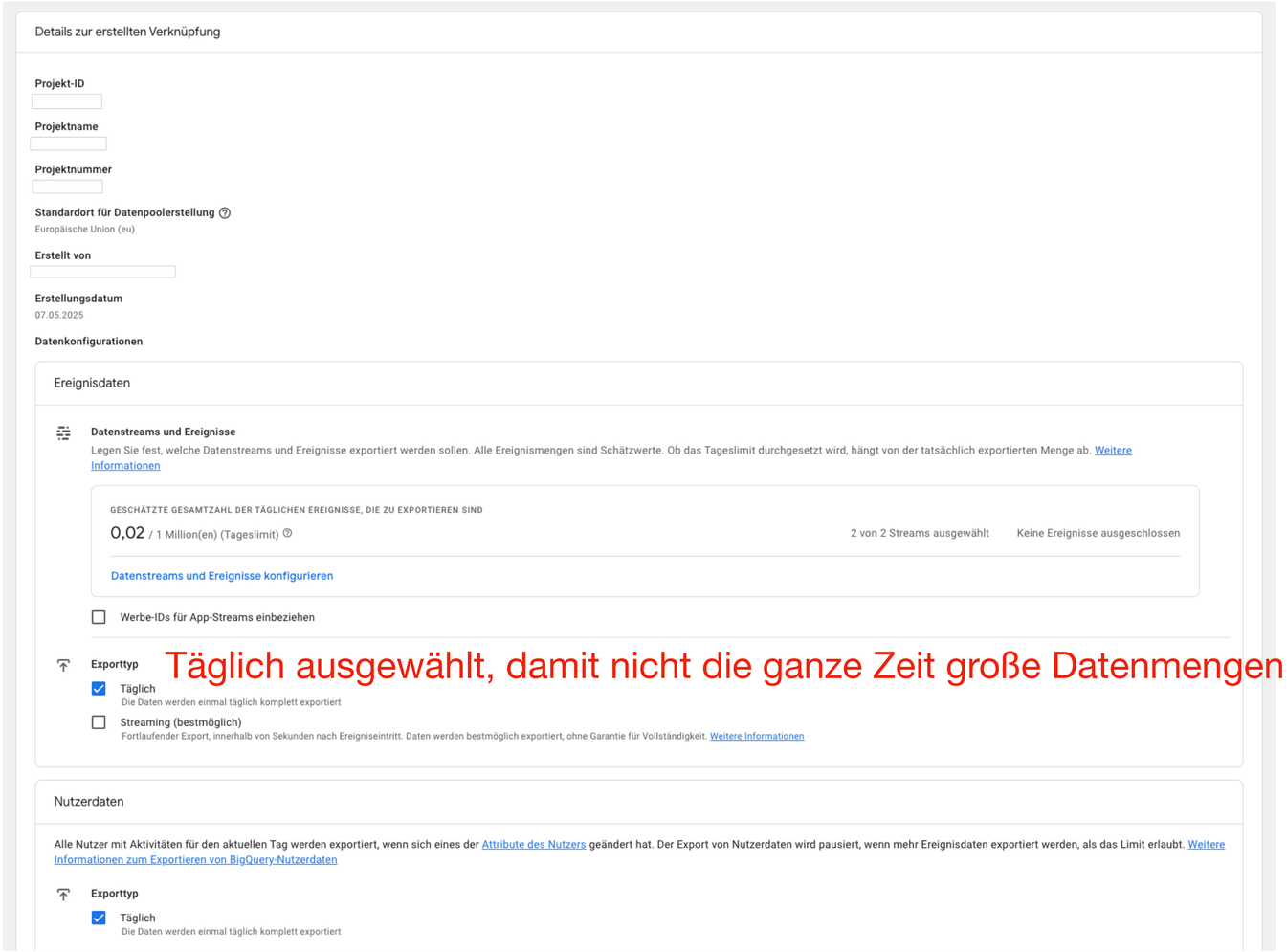
Verbindung GA4 & BigQuery

GA4 & BigQuery verknüpfen



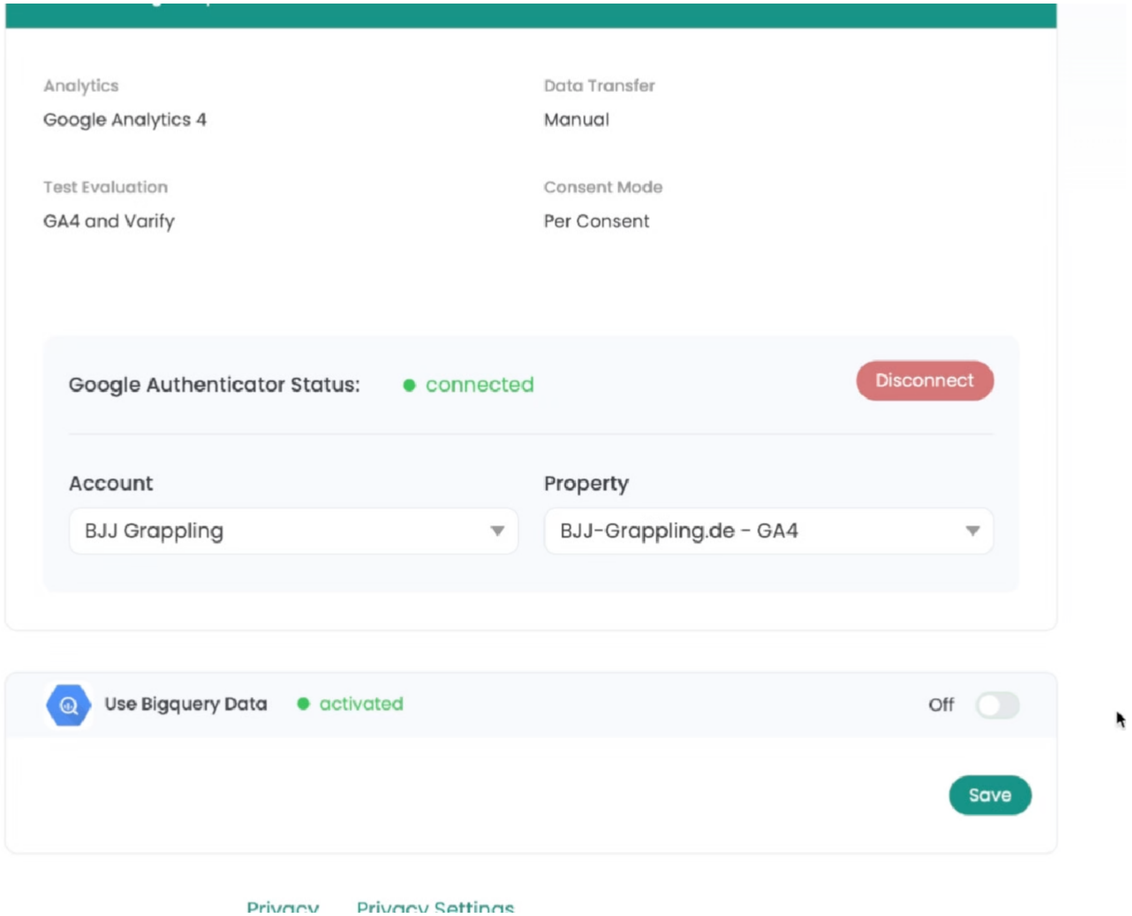


GA4 & BigQuery verknüpfen



Täglich ausgewählt, damit nicht die ganze Zeit große Datenmengen gestreamt werden!

Oder via varify.io per auto setup



Nächste Schritte

- Daten vergleichen für die Single Source of Truth
- Simple SQL Skripte ausprobieren
- Austauschen mit Experten
- BigQuery über varify.io kostenlos ausprobieren (Stichtag: 31.07)
- Mitglied unserer (wirklich) exklusiven Slack Community werden

Mehr Umsatz für deinen Online-Shop

Fragen zum Webinar? Lass uns sprechen!

Niko Spies
CRO Experte

Steffen Schulz
CEO Varify.io