https://public.tableau.com/views/Metrocar2_16999279649930/Duplicateofpercentoftop?:language=en-GB&:display_count=n&:origin=viz_share_link

https://www.loom.com/share/7bd16cf4486a4d0b9fc87bd8db857a64?sid=53e9336e-01f9-4982-bbab-9db3d40f8720

SQL Extraction Code

I analysed the customer journey and behaviour data across Metrocar's ride-sharing service funnel using an SQL query. Downloads, Sign-Ups, Ride Requests, Rides Accepted, Rides Completed, Payments, and Reviews are just a few of the important performance metrics that our query gets data from. The percentage of the top and the percentage of the prior This query forms the basis for a thorough funnel analysis to identify bottlenecks, possibilities for development, and insights on user behaviour separated by platform and age group.

Funnel Data 1 (User Funnel)

```
with Funnel AS(
  SELECT                --download stage
  0 AS funnel_stage,
  'Download' AS funnel_name,
  platform,
  s.age_range,
  date(a.download_ts) AS download_dt,
  --t.transaction_ts::TIME as transaction_time,
  COUNT(DISTINCT app_download_key) as user_count
  --count(r.ride_id)as  ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r ON s.user_id = r.user_id
  LEFT JOIN transactions t ON r.ride_id = t.ride_id
  --where r.request_ts is  null
  GROUP BY funnel_stage,funnel_name, platform, s.age_range,download_dt--,
transaction_time
  UNION ALL
  SELECT                --sign up stage
  1 AS funnel_stage,
  'Sign_ups' AS funnel_name,
  a.platform,
  age_range,
  date(a.download_ts) AS download_dt,
  --t.transaction_ts::TIME as transaction_time,
  COUNT(DISTINCT s.user_id) AS user_count
  --count(r.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s on a.app_download_key = s.session_id
  LEFT JOIN ride_requests r on s.user_id = r.user_id
```

```
  LEFT JOIN transactions t on r.ride_id = t.ride_id
  WHERE s.user_id IS NOT NULL
  GROUP BY funnel_stage,funnel_name, a.platform, age_range, download_dt--,
transaction_time
  UNION ALL
  SELECT
  2 AS funnel_stage,
  'Requested_ride' AS funnel_name,
  a.platform,
  age_range,
  date(a.download_ts) as download_dt,
  --t.transaction_ts:: TIME as transaction_time,
  COUNT(DISTINCT r.user_id) AS user_count
  --count(r.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r on s.user_id = r.user_id
  LEFT JOIN transactions t on r.ride_id = t.ride_id
  WHERE r.request_ts IS NOT NULL
  GROUP BY funnel_stage,funnel_name, a.platform,
age_range,download_dt--,transaction_time
  UNION ALL
  SELECT
  3 AS funnel_stage,
  'Accepted_ride' AS funnel_name,
  a.platform,
  age_range,
  date(a.download_ts) AS download_dt,
  --t.transaction_ts::TIME as transaction_time,
  COUNT(DISTINCT r.user_id) AS user_count
  --count(r.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r ON s.user_id = r.user_id
  LEFT JOIN transactions t ON r.ride_id = t.ride_id
  WHERE r.accept_ts IS NOT NULL
  GROUP BY funnel_stage,funnel_name, a.platform,
age_range,download_dt--,transaction_time
  UNION ALL
  SELECT
  4 AS funnel_step,
  'Completed_ride' AS funnel_name,
  a.platform,
  age_range,
  date(a.download_ts) AS download_dt,
  --t.transaction_ts::TIME as transaction_time,
  COUNT(DISTINCT r.user_id) AS user_count
  --count(r.ride_id) ride_count
```

```
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r ON s.user_id = r.user_id
  LEFT JOIN transactions t ON r.ride_id = t.ride_id
  WHERE r.cancel_ts IS NULL
  GROUP BY funnel_step,funnel_name, a.platform,
age_range,download_dt--,transaction_time
  UNION ALL
  SELECT
  5 AS funnel_stage,
  'Payment' AS funnel_name,
  a.platform,
  age_range,
  date(a.download_ts) as download_dt,
  --t.transaction_ts::TIME as transaction_time,
  COUNT(DISTINCT r.user_id) as user_count
  --count(r.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r ON s.user_id = r.user_id
  JOIN transactions t ON r.ride_id = t.ride_id
  WHERE charge_status = 'Approved'
  GROUP BY funnel_stage,funnel_name, a.platform,
age_range,download_dt--,transaction_time
  UNION  ALL
  SELECT
  6 AS funnel_stage,
  'Review' AS funnel_name,
  a.platform,
  age_range,
  date(a.download_ts) AS download_dt,
  --t.transaction_ts::TIME as transaction_time,
  COUNT(DISTINCT r.user_id) AS user_count
  --count(r.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN reviews r ON s.user_id = r.user_id
          --join reviews e on r.user_id = e.user_id
  JOIN transactions t ON r.ride_id = t.ride_id
  --where r.dropoff_ts is not null
  GROUP BY funnel_stage,funnel_name, a.platform,
age_range,download_dt--,transaction_time
)
 SELECT
  funnel_stage,
  funnel_name,
  platform,
  age_range,
```

```
 download_dt,
 --transaction_time,
 user_count
 --ride_count
FROM Funnel
ORDER BY funnel_stage, platform,download_dt,age_range, user_count DESC;
--ride_count desc
```

Funnel Data 2 (Ride Funnel)

```
WITH Ride AS(
 SELECT
    1 AS funnel_stage,
 'Requested_ride' AS funnel_name,
 a.platform,
 age_range,
 to_char (r.request_ts, 'hh24') AS book_time,
 COUNT(DISTINCT r.user_id) AS user_count,
 COUNT(r.ride_id) ride_count
 FROM app_downloads a
 LEFT JOIN signups s ON a.app_download_key = s.session_id
 LEFT JOIN ride_requests r ON s.user_id = r.user_id
 LEFT JOIN transactions t ON r.ride_id = t.ride_id
 WHERE r.request_ts IS NOT NULL
 GROUP BY funnel_stage,funnel_name, a.platform, age_range,book_time
 UNION ALL
 SELECT
    2 AS funnel_stage,
 'Accepted_ride' AS funnel_name,
 a.platform,
 age_range,
 to_char (r.request_ts, 'hh24') AS book_time,
 COUNT(DISTINCT r.user_id) AS user_count,
 COUNT(r.ride_id) ride_count
 FROM app_downloads a
 LEFT JOIN signups s ON a.app_download_key = s.session_id
 LEFT JOIN ride_requests r ON s.user_id = r.user_id
 LEFT JOIN transactions t ON r.ride_id = t.ride_id
 WHERE r.accept_ts IS NOT NULL
 GROUP BY funnel_stage,funnel_name, a.platform, age_range,book_time
 UNION ALL
 SELECT
    3 AS funnel_stage,
 'Completed_ride' AS funnel_name,
 a.platform,
 age_range,
```

```
  to_char (r.request_ts, 'hh24') AS book_time,
  COUNT(DISTINCT r.user_id) AS user_count,
  COUNT(r.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r ON s.user_id = r.user_id
  LEFT JOIN transactions t ON r.ride_id = t.ride_id
  WHERE r.cancel_ts IS NULL
  GROUP BY funnel_stage,funnel_name, a.platform, age_range,book_time
  UNION ALL
    SELECT
      4 AS funnel_stage,
  'Payment' AS funnel_name,
  a.platform,
  age_range,
  to_char (r.request_ts, 'hh24') AS book_time,
  COUNT(DISTINCT r.user_id) AS user_count,
  COUNT(t.ride_id) ride_count
  FROM app_downloads a
  LEFT JOIN signups s ON a.app_download_key = s.session_id
  LEFT JOIN ride_requests r ON s.user_id = r.user_id
  JOIN transactions t ON r.ride_id = t.ride_id
  WHERE charge_status = 'Approved'
  GROUP BY funnel_stage,funnel_name, a.platform, age_range,book_time
  UNION ALL
  SELECT
       5 AS funnel_stage,
  'Review' AS funnel_name,
  platform,
  age_range,
  to_char (request_ts, 'hh24') AS book_time,
  COUNT(DISTINCT user_id) AS user_count,
  COUNT(ride_id) AS ride_count
  FROM metrocar
  WHERE review IS NOT NULL
  GROUP BY funnel_stage,funnel_name, platform, age_range,book_time
)
SELECT
  funnel_stage,
  funnel_name,
  platform,
  age_range,
  book_time,
  --user_count,
  ride_count
FROM Ride
ORDER BY funnel_stage, user_count DESC, ride_count DESC;
```

Funnel Data 3 (Main Query Funnel)

```
-- Main Query for Funnel Analysis Data Extraction
SELECT
    ad.app_download_key,
    ad.platform,
    ad.download_ts,
    s.user_id,
    s.signup_ts,
    s.age_range,
    rr.ride_id AS requested_ride_id,
    rr.request_ts,
    rr.accept_ts,
    rr.pickup_ts,
    rr.dropoff_ts,
    rr.cancel_ts,
    t.transaction_id,
    t.purchase_amount_usd,
    t.charge_status,
    t.transaction_ts,
    r.review_id,
    r.rating,
    r.review AS review_text
FROM app_downloads ad
LEFT JOIN signups s ON ad.app_download_key = s.session_id
LEFT JOIN ride_requests rr ON s.user_id = rr.user_id
LEFT JOIN transactions t ON rr.ride_id = t.ride_id
LEFT JOIN reviews r ON rr.ride_id = r.ride_id
ORDER BY ad.app_download_key, s.user_id, rr.ride_id;
```

The query for Percent Of Top And Percent Of Previous

```
-- Main query for calculating 'Percent of Top' and 'Percent of Previous'
WITH Funnel AS (
    -- Stage 0: App Downloads
    SELECT
        0 AS Funnel_stage,
        'App Downloads' AS funnel_name,
        COUNT(DISTINCT app_download_key) AS user_count
    FROM app_downloads

    UNION ALL

    -- Stage 1: Signups
    SELECT
        1,
        'Signups',
```

```
    COUNT(DISTINCT user_id)
FROM signups

UNION ALL

-- Stage 2: Ride Requests
SELECT
    2,
    'Ride Requests',
    COUNT(DISTINCT user_id)
FROM ride_requests
WHERE request_ts IS NOT NULL

UNION ALL

-- Stage 3: Rides Accepted
SELECT
    3,
    'Rides Accepted',
    COUNT(DISTINCT user_id)
FROM ride_requests
WHERE accept_ts IS NOT NULL

UNION ALL

-- Stage 4: Rides Completed
SELECT
    4,
    'Rides Completed',
    COUNT(DISTINCT user_id)
FROM ride_requests
WHERE dropoff_ts IS NOT NULL

UNION ALL

-- Stage 5: Payments Approved
SELECT
    5,
    'Payments Approved',
    COUNT(DISTINCT r.user_id)
FROM transactions t
JOIN ride_requests r ON t.ride_id = r.ride_id
WHERE t.charge_status = 'Approved'

UNION ALL

-- Stage 6: Reviews
SELECT
```

```
        6,
        'Reviews',
        COUNT(DISTINCT user_id)
    FROM reviews
)
-- Final query to calculate 'Percent of Top' and 'Percent of Previous'
SELECT
    funnel_stage,
    funnel_name,
    user_count,
    ROUND((user_count * 100.0 / FIRST_VALUE(user_count) OVER (ORDER BY
funnel_stage)), 2) AS percent_of_top,
    ROUND((user_count * 100.0 / LAG(user_count) OVER (ORDER BY funnel_stage)), 2) AS
percent_of_previous
FROM Funnel
ORDER BY funnel_stage;
```