Metrocar Funnel

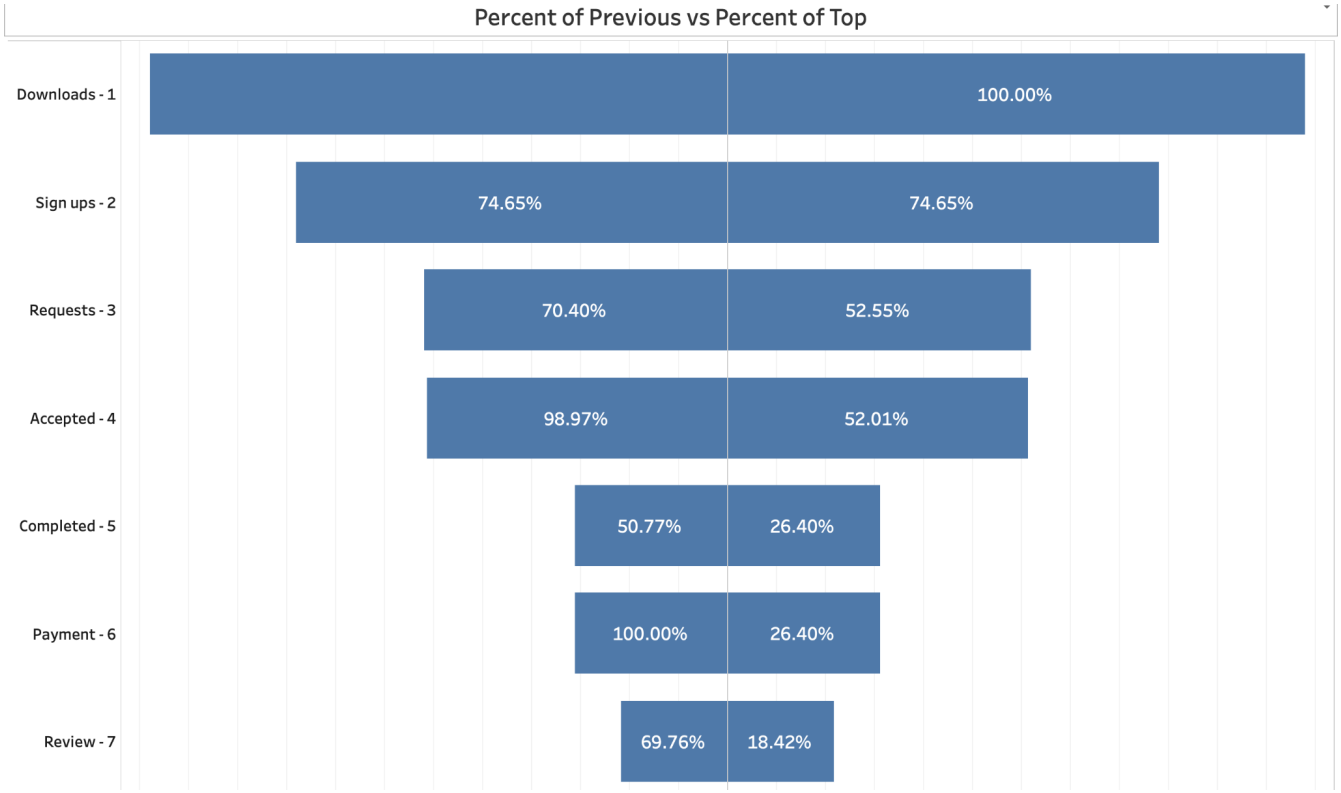
Alishia Baker
10/29/2023

TL:DR

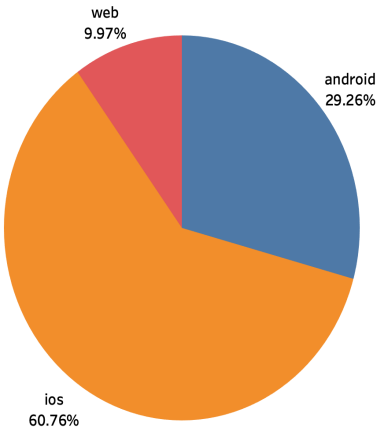
I recommend Metrocar launches some promotions for new users as well as new drivers to increase their conversions over the most significant drop off stages throughout the funnel.

Overview

Metrocar funnel displays a gradual decline through step one, where customers first download the app to the final step of review on their experience. The most significant drop offs occur between the stages 4 (Accepted) to 5 (Completed), with other smaller significant drop offs throughout the funnel. I believe creating some promotions for new drivers would be a good way to increase the number of drivers available and possibly offer higher fare pay during peak times to accommodate the volume. Also, small penalties can be applied to drivers that accept a ride but don't complete it, like inputting an acceptance and cancellation rating. In order to bridge the gap between when a user first downloads the app to when they first request a ride, I recommend initiating promotions for the users first ride. Lastly, rewarding the users with incentives to leave a driver review, as well as making the drivers aware that higher quality reviews leads to more success in the rideshare industry can increase conversion in the final steps of the funnel.



Context



For the funnel analysis I created a seven step funnel:

1. App Download: A user downloads the Metrocar app on one of 3 devices: iOS, Android or the web. As you can see the iOS platform (Orange) has the highest user count, holding nearly 61% of all Metrocars user downloads. Android (Blue) follows with 29%.

2. Signup: The user creates an account in the Metrocar app that includes all their basic personal information.

3. Requests Ride: The user opens the app and requests a ride by entering their pickup location, destination, and ride capacity.

4. Driver Acceptance: A nearby driver receives the request and accepts the ride.

5. Ride Completed: The driver arrives at the pickup location and successfully takes the user to their destination.

6. Payment: Upon completion, the user is charged automatically through the app, and a receipt is sent to their email.

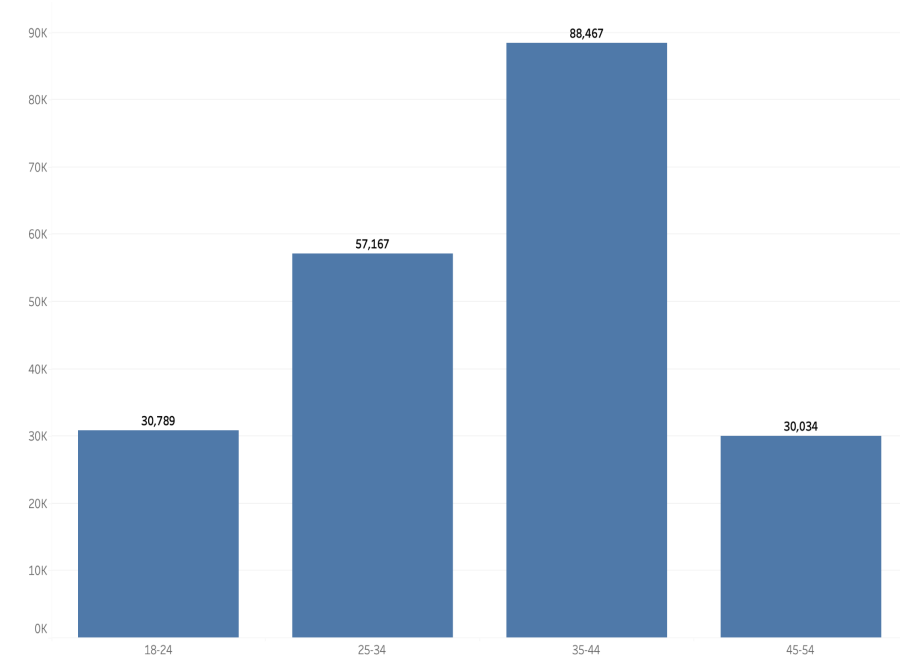
7. Review: The user is prompted to rate their driver and leave a review of their ride experience.

Dataset

The relevant code used to aggregate the dataset and create this funnel appears in the appendix below. I broke the datasets into different queries in order to be more efficient and make it easier to visualize. The first one creates the funnel steps 1-7, the next query pulls more details about users at each step of the funnel including age range and platform used to download the app. Lastly, I created a dataset for the user count and ride count and each hour of the day.

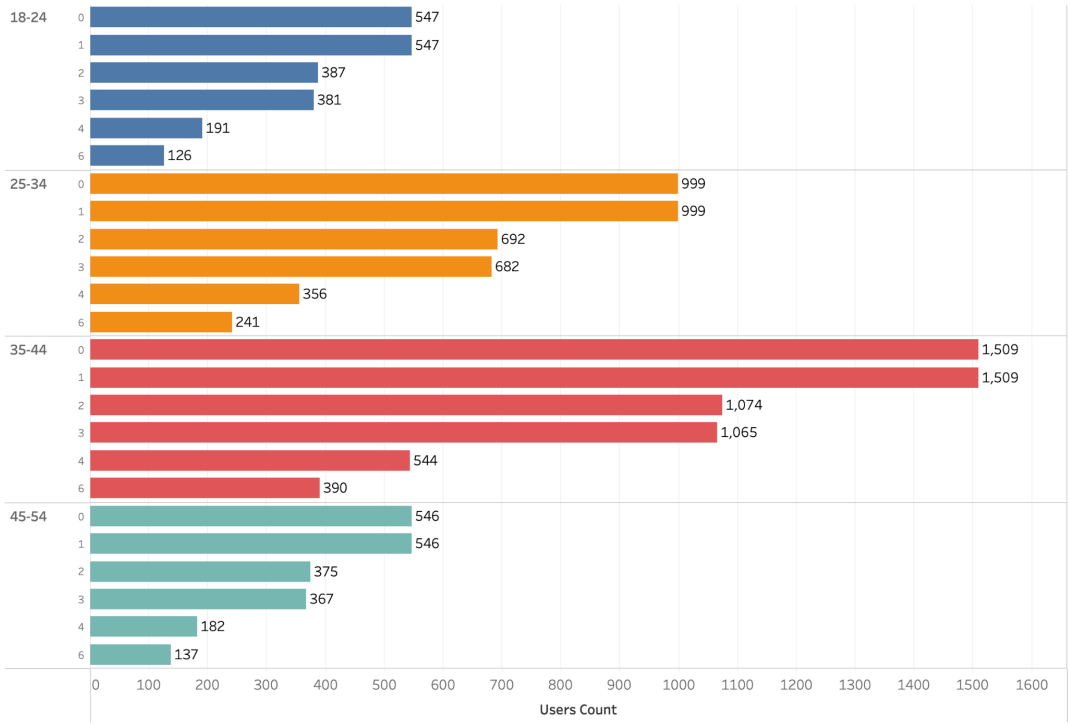
Summary

- Since ios has a significantly higher amount of downloads; about double the amount of android, I would advise Metrocar to focus their marketing more in the Google App store. Although the web downloads are only 10% it's not a cause for concern because most people are mobile when ordering rideshare, therefore phone apps are going to dominate the amount of user downloads.
- Users between the ages of 35-44 are target customers with an overall user count of 88, 467. Next in line are users aged between 24-35 with an overall count of 57,167. Both of these groups perform significantly better at all stages of the funnel.
- If Metrocar wants to adopt a price-surging strategy, I would advise them to aim at the peak hours of 8-9am, 4-5pm and 6-7pm where the user and ride counts are the highest.This is most likely due to daily work commutes.
- The area of the funnel that has the lowest conversion rate lies between steps 4 and 5 where rides are accepted but not completed. A good way to improve this area would be to be transparent with riders and add in multiple driver stats, not just satisfaction but also acceptance and cancellation rates. That way there is incentive for the drivers to want to complete more of their rides successfully. Even create levels at which the driver reaches based on stats to unlock special perks.



Details

This visualization shows which age groups perform best at each stage of the funnel. Our target users are age groups 35-44 and 25-34. In turn these groups have the highest ride counts.



5

In order to create effective price surging strategies, I recommend referring to the following visualization that displays the user count and ride count at each hour of the day. Peak times concurrent with everyday work commute hours or “rush hours”.

Appendix

Dataset Queries

FUNNEL RESULTS

```
WITH downloads as (
  SELECT app_download_key, download_ts
  FROM app_downloads),
  sign_ups as (
  SELECT user_id, signup_ts
  FROM signups s
  LEFT JOIN downloads d
  ON s.signup_ts = d.download_ts),
requests as (
  SELECT DISTINCT r.user_id, request_ts
  FROM signups s
  INNER JOIN ride_requests r
  ON s.user_id = r.user_id),
accepted as (
  SELECT DISTINCT user_id, accept_ts
  FROM ride_requests
  WHERE accept_ts IS NOT NULL),
  completed as (
  SELECT DISTINCT user_id, dropoff_ts
  FROM ride_requests
 WHERE dropoff_ts IS NOT NULL),
  payment as (
  SELECT DISTINCTt user_id
  FROM ride_requests r
  INNER JOIN transactions t
  ON r.ride_id = t.ride_id
  WHERE charge_status = 'Approved'),
review as (
  SELECT DISTINCT r.user_id
  FROM ride_requests r
  INNER JOIN reviews rv
  ON r.user_id = rv.user_id
  WHERE  review IS NOT NULL)

SELECT 'Downloads' as step , COUNT(*) FROM
downloads UNION

SELECT 'Sign ups' as step , COUNT(*) FROM
sign_ups UNION

SELECT 'Requests' as step , COUNT(DISTINCT
user_id) FROM requests UNION

SELECT 'Accepted' as step, COUNT(DISTINCT
user_id) FROM accepted UNION

SELECT  'Completed' as step, COUNT(DISTINCT
user_id) FROM completed UNION

SELECT 'Payment' as step, COUNT(*) FROM
payment UNION

SELECT 'Review' as step, COUNT(*) FROM review

ORDER BY count desc
```

METRICS BY FUNNEL STAGE

https://docs.google.com/spreadsheets/d/1Iw_Uf3T4DHKetWwX2yPN8lDP7NhT828eP1Gk3teclpw/edit?usp=sharing

USER & RIDE COUNT BY HOURS

```
SELECT COUNT(DISTINCT user_id) AS user_count, COUNT(request_ts) AS ride_count,

EXTRACT(hour from request_ts) as request_hr

FROM ride_requests

GROUP BY request_hr
```

TABLEAU VISUALIZATIONS

https://public.tableau.com/views/MetrocarDashboardVisuals/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

VIDEO PRESENTATION

https://www.loom.com/share/18592ca743834a8696f7b40e68463872?sid=6da3c7f6-bdb3-40bd-872c-e18cdb89a43b