

Report MetroCar – Funnel Analysis

Daniel Kaufman Mattone

05/12/2023

1. Summary

I have conducted a comprehensive funnel analysis of our service, spanning the entire process from app download to ride review. This analysis takes into account the overall journey, as well as specific platform and age group breakdowns. My primary recommendation is to concentrate on enhancing the conversion rate for users whose ride requests were accepted by a driver, ultimately resulting in completed rides.

2. Context

Presently, our app boasts a diverse user base spanning different age groups and utilizing various platforms. To gain a deeper understanding of our clientele and determine where our focus should lie, I devised a seven-stage funnel, which encapsulates the user journey: app download, app registration, ride request, driver acceptance, ride completion, payment, and app rating.

I initiated a comprehensive analysis of this entire funnel, scrutinizing the attrition rates at each stage of the process. Moreover, I dissected the funnel data by platform (iOS, Android, and WEB) and age group (18-24, 25-34, 35-44, 45-54). Subsequently, I honed in on specific stages to unearth the underlying reasons for user drop-offs, enabling a more targeted approach to address these issues.

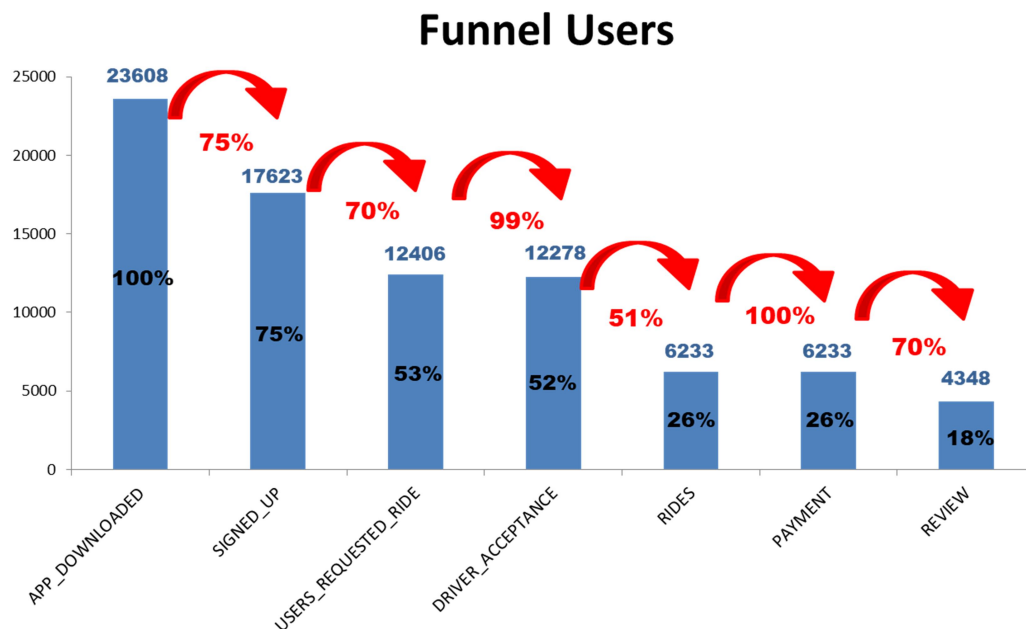
2.1. Dataset

I have worked with five distinct tables:

- App_downloads: session_id, platform, download timestamp
- Signups: user_id, session_id, signup timestamp, the age range the user belongs to
- Ride_requests: user_id, ride_id, driver_id, ride request timestamp, driver accept timestamp, pickup coordinates, destination coordinates, pickup timestamp, dropoff timestamp, cancel timestamp
- Transactions: ride_id, purchase amount in USD, charge status (approved or cancelled), transaction timestamp
- Reviews: review_id, ride_id, driver_id, user_id, rating (rating from 0 to 5), free response (text response given by user/requester)

3. Results

Taking into account all users who have navigated through the entire process, the ultimate funnel is as follows:

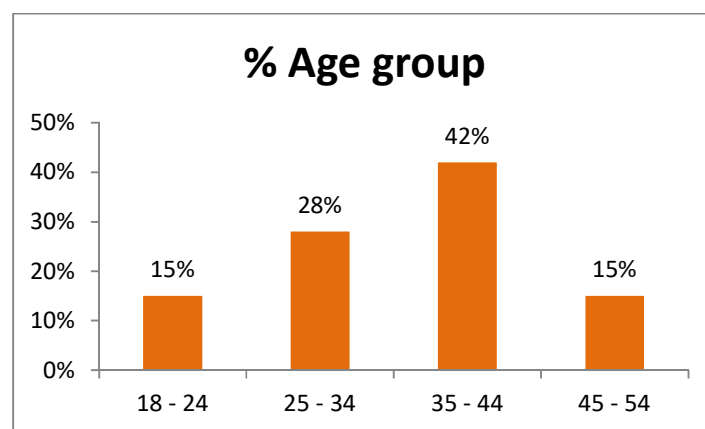
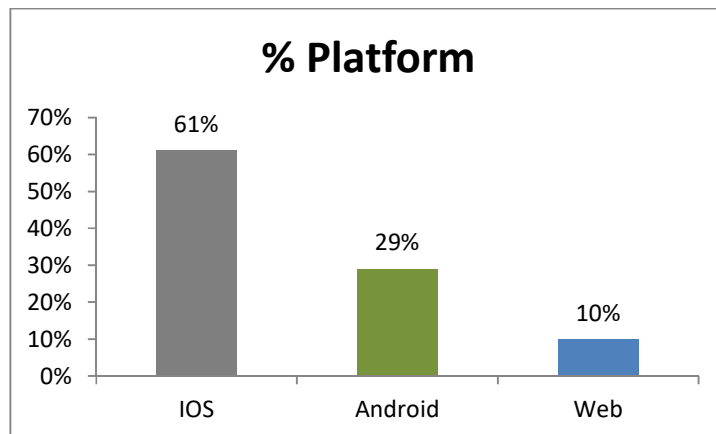


We can observe that a significant 75% of users who downloaded the app didn't proceed to sign up. This suggests the need to scrutinize our sign-up page's user experience to streamline the process. We should investigate why 25% of app downloaders aren't completing this essential step, as it should ideally be straightforward and user-driven.

Another critical point of concern is the fact that only 51% of users whose ride requests were accepted actually completed their rides. This constitutes our most substantial drop-off, requiring immediate attention to address and rectify this issue.

3.1. Main users

While I conducted a detailed funnel analysis, breaking down the data by age group and platform, the differences in drop-off rates were minimal, with variances of just 2% at most. However, a key insight is the identification of our target customers. The charts below reveal the underlying trends.



While I conducted a detailed funnel analysis, breaking down the data by age group and platform, the differences in drop-off rates were minimal, with variances of just 2% at most. However, a key insight is the identification of our target customers. In terms of platforms, iOS is the dominant choice, with 61% of our user base, compared to 29% on Android and 10% on the Web.

Examining age groups, the majority of our users fall between the ages of 25 and 44, accounting for 70% of our user base. Specifically, 42% belong to the 35-44 age range, and 28% are within the 25-34 age bracket. Users aged 18-24 and 45-54 each make up 15% of our user demographic. Understanding these target demographics will be crucial for our strategic decision-making.

4. Advanced Analysis

4.1 Waiting time for the ride

To delve deeper into our analysis, I shifted our focus towards a detailed examination of the ride-related aspects.

Addressing the prominent drop-off point observed earlier, I delved into the reasons behind ride cancellations. Remarkably, 42% of ride requests were ultimately canceled, with 15% of these

cancellations occurring after a driver had already accepted the ride. One plausible explanation for these cancellations might be the waiting time experienced by users.

On average, for rides that were successfully completed, users waited approximately 14 minutes for their pick-up, with a further 6-minute wait for driver acceptance. In contrast, for those rides that were not accepted by a driver and subsequently canceled, the average wait time was 11 minutes before cancellation. For rides that were accepted by a driver but eventually canceled, users waited an average of 20 minutes before canceling, with driver acceptance occurring roughly 15 minutes after the initial request. These insights shed light on the critical role of waiting times in ride cancellations.

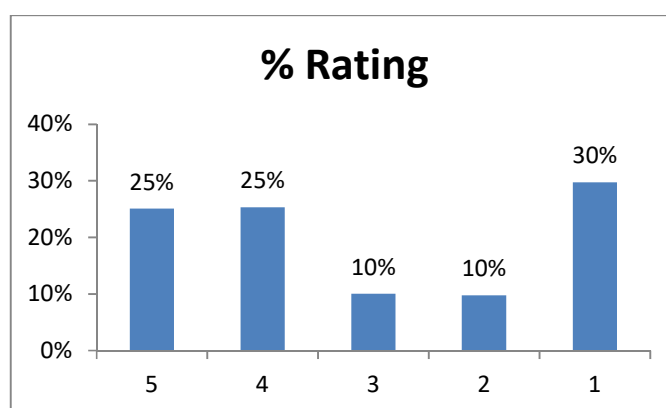
4.2. Unprocessed payments

Another noteworthy aspect of our process pertains to payments. It's encouraging to see that 100% of users who completed a ride have made at least one payment. However, there's a 5% occurrence of finished rides that haven't been paid for. This discrepancy likely doesn't reflect issues with user honesty or our app's integrity.

To address this, I recommend implementing an automated payment system to mitigate this problem and ensure seamless and consistent payment processing.

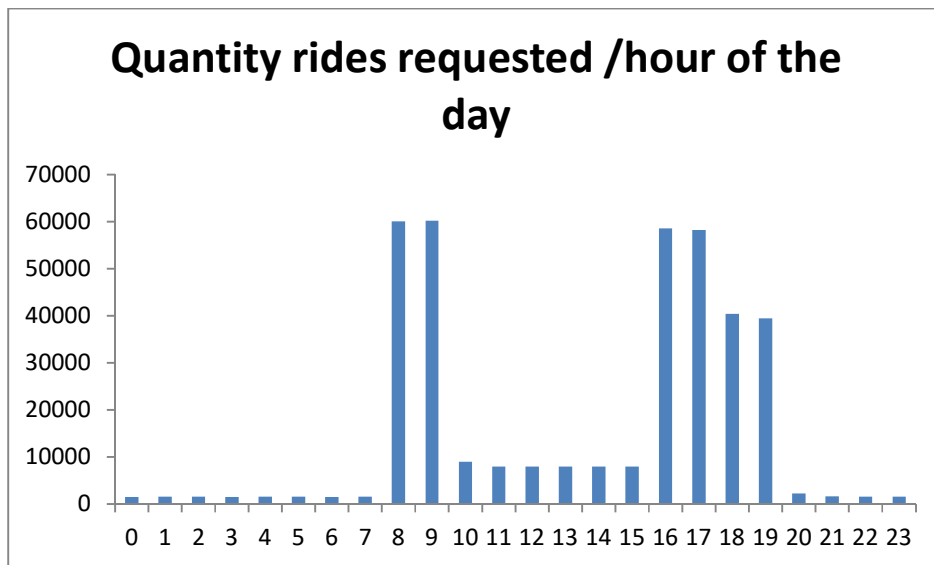
4.3. Unassessed rides

Out of all the rides we've provided, a commendable 73% received a rating. It's worth noting, however, that 30% of the users who completed rides with us have never rated a driver. Now, let's take a closer look at the distribution of ratings our drivers have received from our users:



It appears that one possible explanation for this trend is that users might skip rating for routine or uneventful rides. However, when a ride is particularly unsatisfactory (rated as 1), users are more inclined to provide feedback. To encourage more users to share their experiences, we could consider introducing incentives or perks that incentivize them to leave reviews.

4.4. Surge pricing



Based on my analysis, it's clear that 82% of our ride requests are concentrated between 08:00 to 09:59 and 16:00 to 19:59. This pattern aligns with our primary user age group (25-44) and is likely due to the typical commute times when people are traveling to and from work.

In light of this, I propose implementing a surge pricing strategy. This would involve increasing prices during these peak hours and reducing them during non-rush hours. This approach aims to maximize revenue during both periods, capitalizing on the high demand during peak commute times and optimizing fare pricing during off-peak periods.

5. Recommendation

In summary, based on my analyses and findings, I recommend that MetroCar concentrate its efforts on targeting the iOS platform and users aged 25 to 44, as this demographic constitutes more than 70% of our user base.

Furthermore, considering the funnel analysis and in-depth insights, it is advisable to engage our UX team to reevaluate the sign-up process. Additionally, we should explore strategies to expedite the ride acceptance process, thereby reducing the likelihood of user cancellations. Implementing automatic payment methods can help streamline transactions and reduce potential revenue loss. Encouraging more users to provide ride ratings should be a focus area as well.

To capitalize on demand fluctuations, I suggest introducing surge pricing, increasing rates during peak hours and reducing them during non-rush periods. In conclusion, I strongly recommend prioritizing actions that enhance the speed of ride acceptance, introduce automatic payments, and implement surge pricing to improve overall efficiency and profitability.

6. Video presentation

<https://www.loom.com/share/beece461b7ee48728433b30445b28f68?sid=1253bdd8-5092-477c-84ca-a2d4a6a1452c>