Group Project Report

METROCAR FUNNEL ANALYSIS

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Project Overview

The Funnel Analysis Group Project aims to dissect the customer journey of Metrocar, a ride-sharing app akin to Uber or Lyft, to identify improvement areas and optimize the user experience. This report outlines the process of analyzing Metrocar's customer funnel using SQL for data extraction and Pandas for analysis and visualization. Key business questions have been addressed to provide actionable insights for enhancing specific stages of the funnel.

PROJECT BACKGROUND

About Metrocar

Metrocar connects riders with drivers via its mobile application. The platform facilitates ride-hailing by providing a user-friendly interface for users to book and manage rides.

The Funnel Analysis

In any user journey, it is completely normal to anticipate a drop-off at each stage. Not all individuals who download the app will proceed to sign up, and not all signed-up users will actively utilise the service. This attrition, known as drop-off, is a typical aspect of the user acquisition and retention process. To address this, a comprehensive funnel analysis is crucial.

Here are the main reasons:

The primary objective of a funnel analysis is to quantify the drop-off that occurs at each stage of the user journey. By tracking the conversion rates from one stage to the next, we can identify precisely where and how users are exiting the funnel. This data-driven approach enables us to understand the bottlenecks and identify areas where improvements are needed.

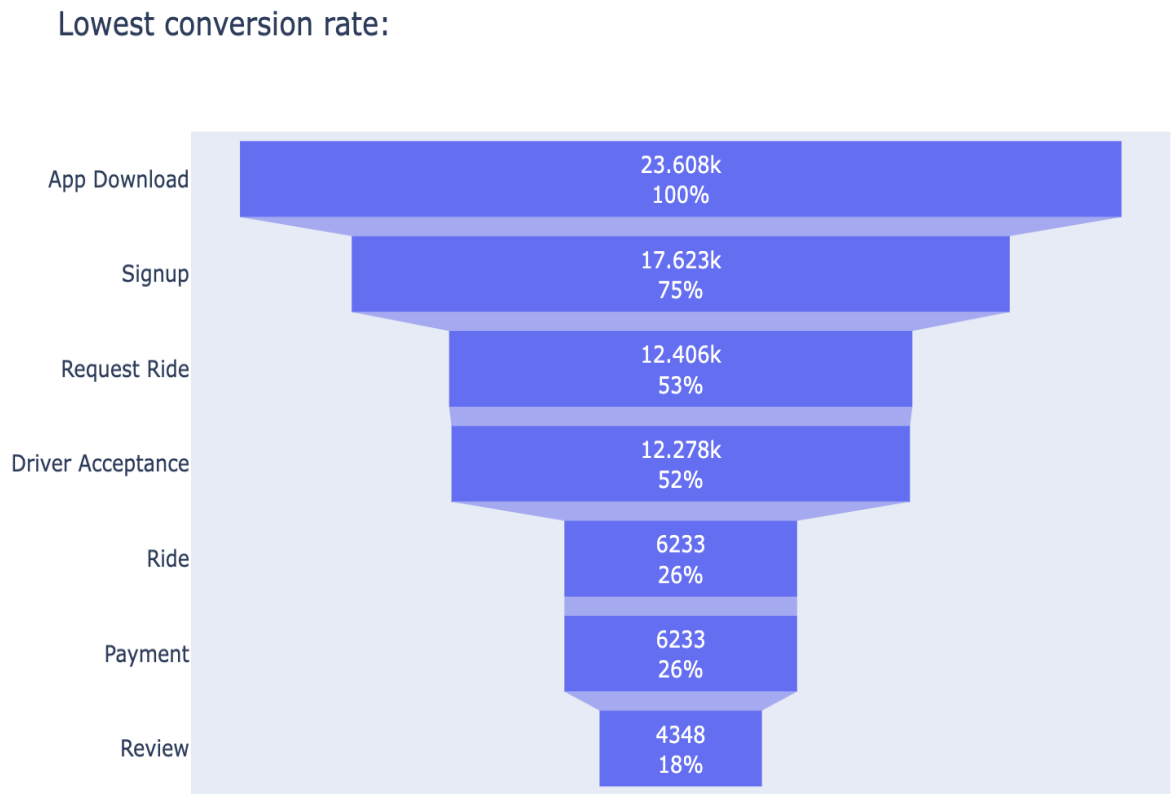
In light of the information derived from the analysis, further recommendations will be provided on how to further improve the application's performance, increase user interaction, and lay down the groundwork for sustained development. The usage of data collecting and Funnel solutions enables us to come up with informed decisions and suggest improvements concerning the MetroCar application for users' benefit.

Funnel Performance

This analysis employs the dynamic funnel method that allows us to work through different perspectives such as age, platform usage, and download date to analyse the unique patterns of the users engagement patterns.

FUNNEL STAGE ANALYSIS

1. It has been observed that the conversion rate declines significantly between the driver acceptance and ride completion phases, indicating a high number of cancellations.



Possible reasons:

- Driver cancellations due to long distances or low fares.
- User cancellations due to extended wait times or changed plans.

Recommendations:

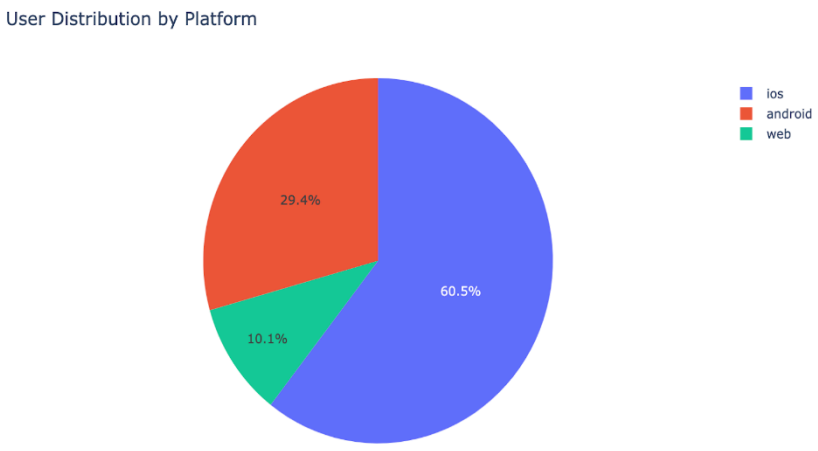
- *Analyse Cancellation Patterns:* Undertake a study to establish various causes of cancellation that occur from the moment the driver accepts, to the end of the trip.
- *Improve Communication:* Improve interaction between a driver and a rider in case there are complications to be resolved. It's recommended to introduce more options like the possibility of talking in real time or using status updates.
    - Allow users to track driver location in real-time to manage expectations.
    - Explore offering users options to pre-confirm fares for faster ride acceptance.
- *Optimise Driver Matching:* Optimise the driver selection process to improve the likelihood of getting a driver that is available during the rider's time of demand.
- *Incentivize Completion:* Suggest changes that would make it mandatory for both the driver and the rider to pay some amount of commitment to a ride, or any other measures for its implementation to minimise cancellations.
    - Implement incentives for drivers on longer trips or during peak hours.
- *Provide Support and Training:* Communicate with the drivers, offer them extra assistance and conduct more training sessions on how to handle issues with rides and proper cancellation management

Further Analysis:

We can segment the data by factors like time of day, user demographics, or location to identify further optimization opportunities. Additionally, user feedback analysis (reviews, surveys) can reveal qualitative insights into user experience pain points.

By analysing the customer funnel with SQL and Pandas, we can identify areas for improvement in the Metrocar app, leading to increased user acquisition, ride completion rates, and overall customer satisfaction. This data-driven approach allows Metrocar to optimise its services and gain a competitive edge in the ride-sharing market.

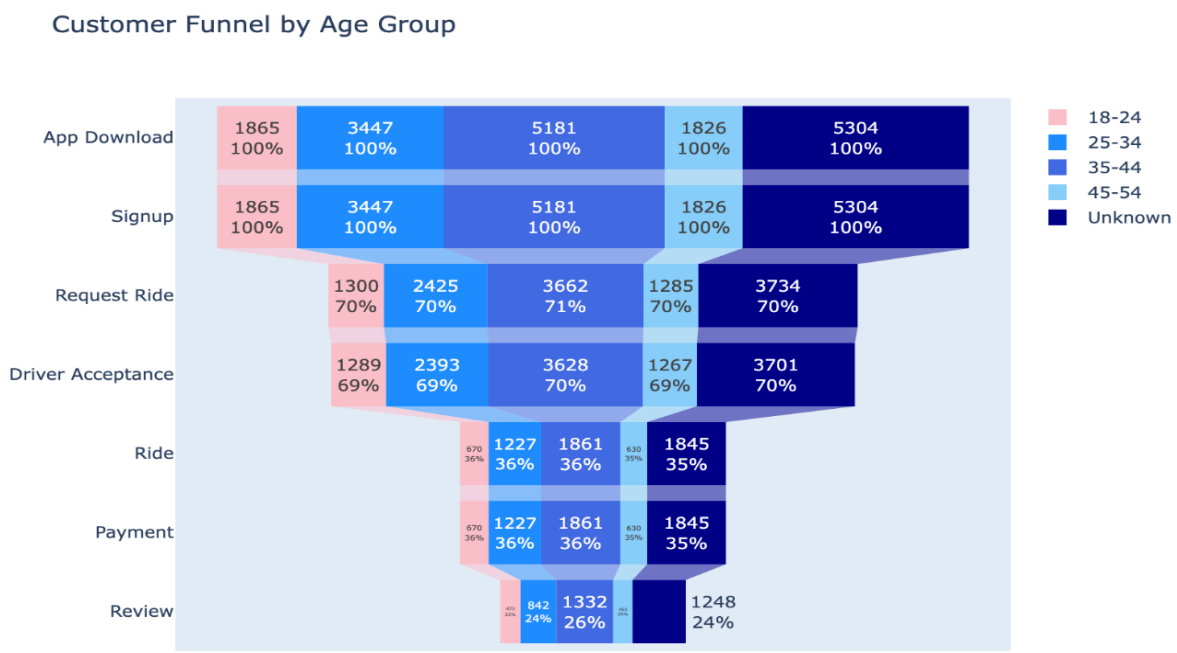
2. iOS users have the highest count followed by android



Recommendations:

- Improve User Experience for Android and Web Users
- Concentration should be geared towards improving the interaction and the usage retention of these users.
- Introduce the techniques of responsive web design so that it will improve the layout and design of the website for multiple devices and multiple resolutions, hence making it easily usable on several gadgets.
- At any given time, the core features and all the solutions offered by this platform should be fully functional and available throughout all the channels, thus enhancing the brand credibility.

3. The age range - 35-44 has the highest user followed by 25-34. The users in age 45-54 are the smallest count of application users



Recommendations:

- Age-Specific Marketing Strategies
- Prepare the age-linked promotions and presents. For example, having special offers for family trips for the age ranging between 35-44 years
- Develop campaigns that are sensitive to the seasons and regions in which the users operate and their ages as well. For instance give promotions during school vacations

Conclusion

Based on the analysis, actionable recommendations have been made to enhance Metrocar's overall customer experience and operational efficiency-

- *Improve ETA accuracy:* Enhance algorithms to provide more accurate arrival time estimates.
- *Clear communication:* Ensure clear instructions for both riders and drivers regarding pickup locations and pricing for the rides
- *Payment troubleshooting:* Offer multiple payment options and address any payment processing issues promptly.
- Secure payment and driver verification
- Improve "Ride Accepted" to "Ride Completed" transition (50% drop-off)

Please refer to the Colab in Appendix section below for further analysis and visualisations.

Appendix:

Google Colab

Github

Presentation