

# Mertocar Funnel Analysis Project Report

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## Summary

Metrocar, a ride-sharing application similar to industry giants Uber and Lyft, has commissioned a comprehensive Funnel Analysis Mastery Project to enhance its customer funnel and, in turn, optimize user engagement and conversion. The project's primary objective is to employ SQL for data querying and Tableau or Google Sheets for data visualization to scrutinize Metrocar's user journey from app download to ride completion. This funnel analysis aims to identify and address specific drop-off points in the user journey, provide insights for marketing strategies across different platforms (iOS, Android, and web), evaluate the performance of various age groups, understand ride request distribution throughout the day, and pinpoint areas in the funnel with the lowest conversion rates for improvement. Metrocar's business model revolves around connecting riders with drivers via a user-friendly mobile application, and this project will leverage data-driven insights to drive growth and revenue, making it a critical endeavor for the company's success.

## Objectives

The objectives of the Metrocar Funnel Analysis Mastery Project are:

- 1- Identify and improve drop-off points in the customer funnel.
- 2- Provide platform-specific marketing insights.
- 3- Analyze age group performance.
- 4- Study ride request distribution for surge pricing.
- 5- Enhance the stage with the lowest conversion rate.

These objectives aim to boost user engagement and drive revenue growth for Metrocar.

## Approach

The approach for the Metrocar Funnel Analysis Mastery Project involves the following steps:

**Data Exploration with SQL:** This phase will provide a solid understanding of the dataset's structure and the various stages of the customer funnel.

**Funnel Metrics Development:** we will analyze the data to answer the business questions.

**Presenting Insights to Stakeholders:** This will serve as the final submission, with clear insights and actionable recommendations for Metrocar's stakeholders.

The overarching goal is to leverage data-driven insights to enhance the customer funnel, increase user engagement, and drive revenue growth for Metrocar.

## Result

### 1- Providing funnel data

**Funnel Progression:** The funnel represents the sequential stages that users go through when interacting with Metrocar. It begins with app downloads and ends with user reviews.

**Conversion Rates:** At each stage, we can observe the percentage of users who progress to the next step compared to the previous step. For instance, 74.6% of those who downloaded the app went on to sign up.

**Drop-off Points:** Notably, the largest drop-off occurs between the "ride\_requested" and "user\_completed" stages, where only 50% of users proceed. This stage may require further analysis to understand the reasons for drop-offs and how to improve it.

**Final Conversion:** The funnel ends with "user\_reviews," indicating that 18.4% of those who initially downloaded the app completed the entire process, which involves leaving a user review.

**Payment and driver\_accepted:** Interestingly, the "payment\_approved" and "driver\_accepted" stages have higher conversion rates compared to earlier steps, possibly indicating a smoother user experience in these final stages.

These insights can guide Metrocar's efforts to optimize the customer funnel by focusing on improving the "driver\_accepted" stage to reduce drop-offs and enhance the overall user experience.

funnel\_users

Funnel Step	Funnel Name						
1	downloaded_app			23,608 100.0%		23,608	
2	signups			17,623 74.6%		17,623 74.6%	
3	ride_requested			12,406 52.5%		12,406 70.4%	
4	driver_accepted			12,278 52.0%		12,278 99.0%	
5	user_completed			6,233 26.4%		6,233 50.8%	
6	payment_approved			6,233 26.4%		6,233 100.0%	
7	user_review			4,348 18.4%		4,348 69.8%	
				Percent of Top		Percent of previous	

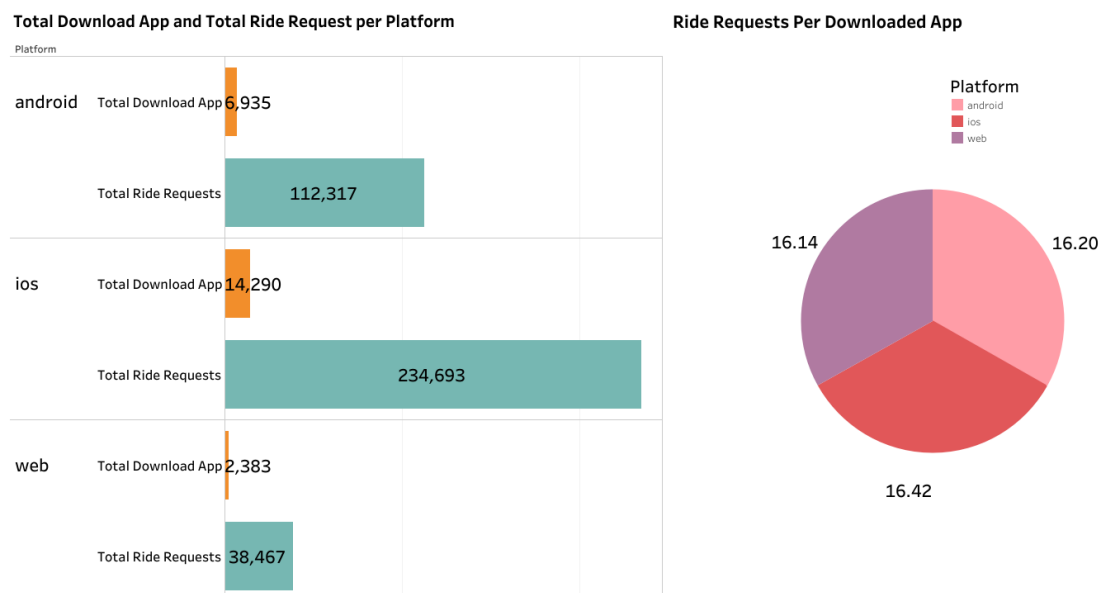
## 2- Platform Engagement

All three platforms, iOS, Android, and web, exhibit similar user engagement levels when measuring the number of ride requests per downloaded app. The differences between the platforms are relatively minor.

This suggests that users on all three platforms are actively using the Metrocar service, and no single platform significantly outperforms the others in terms of engagement.

Given the comparable levels of user engagement across all platforms, it is advisable to distribute the marketing budget evenly among iOS, Android, and web platforms. This balanced approach ensures that Metrocar maintains and continues to grow its user base across all platforms, maximizing the reach and impact of marketing efforts.

<https://public.tableau.com/app/profile/azam.fatemi/viz/TotalDownloadAppandTotalRideRequestperPlatform/Dashboard1?publish=yes>



### 3- Age Range Engagement

**Downloaded App:** All age groups have users who downloaded the app, with the "Unknown" category having the highest number of downloads. This might indicate general interest, but it doesn't tell us much about which group is most engaged.

**Driver Accepted:** The "35-44" age group has the highest number of users whose ride requests were accepted by drivers. They are closely followed by the "25-34" age group. This suggests that users in their mid-30s to mid-40s perform best at this stage.

Payment Approved: Again, the "35-44" age group has the highest number of users who successfully completed the payment process, followed by the "25-34" group.

Ride Requested: The "35-44" age group leads in terms of ride requests, followed by the "25-34" group.

Signups: The "35-44" age group continues to lead in signups, followed by the "25-34" group.

User Completed: The "35-44" age group has the highest number of users who completed rides, followed by the "25-34" group.

User Review: Once again, the "35-44" age group leads in leaving reviews, followed by the "25-34" group.

From this analysis, it seems that the "35-44" age group consistently outperforms other age groups at each stage of the funnel. They are likely your target customers since they not only have high engagement rates in terms of downloads and signups but also in terms of ride requests, payments, and user reviews.

However, it's essential to consider that the "25-34" age group is also quite engaged and represents a significant portion of your user base. Depending on your specific business goals and strategies, you may want to target both the "35-44" and "25-34" age groups in your marketing efforts.

<https://public.tableau.com/app/profile/azam.fatemi/viz/AgeRangeEngagement/age?publish=yes>



## **4- Distribution of Ride Requests and Surge Pricing Strategy**

### **Monthly Analysis:**

The data analysis revealed that the month of September consistently exhibits the highest ride request volume. This suggests that certain months experience a substantial increase in demand for ride-sharing services.

### **Day of the Week Analysis:**

An analysis of ride request patterns showed a significant discrepancy between weekdays and weekends, with weekdays having approximately three times the number of ride requests compared to weekends.

### **Specific Days of the Week:**

Further investigation highlighted that Wednesdays and Fridays stand out with notably higher ride request volumes. These specific weekdays likely correspond to particular events or routines that drive increased demand for ride-sharing services.

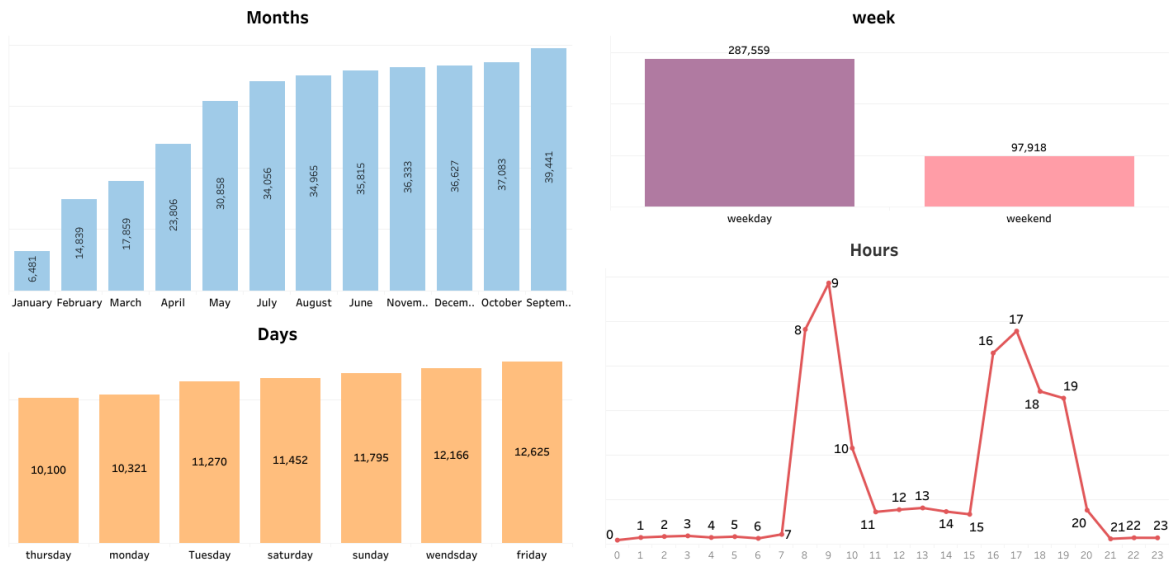
### **Hourly Analysis:**

The analysis pinpointed specific hours with high ride request frequencies, including 9 am, 8 am, 5 pm, and 4 pm. These hours are indicative of peak commuting or rush hours when ride-sharing demand spikes.

By leveraging these insights, your ride-sharing service can successfully implement surge pricing to drive revenue growth without compromising user satisfaction.

<https://public.tableau.com/app/profile/azam.fatemi/viz/TimeMetrocar/time?publish=yes>

## Pick up Time for Ride\_requested



# Recommendation

## 1- Offer in-app assistance

Since the "user\_completed" step has the lowest conversion rate in the funnel, with a percentage of 50.8% compared to the previous step, "driver\_accepted", offer in-app assistance and guidance to users who encounter difficulties in completing their rides. Implement features that allow users to easily reach out to customer support or report issues within the app.

## 2- Rewards

Consider implementing personalized offers and incentives designed to motivate users to complete their rides. Such incentives might include discounts, loyalty rewards, or special promotions tailored to individual user preferences and behavior.

## 3- Performance Monitoring

Continuously monitor the performance of the "user\_completed" step by tracking user behavior, conversion rates, and other relevant metrics. Utilize data analytics tools to identify trends and issues that may be affecting conversion rates.

## 4- Surging Price

Implement surge pricing during September, target weekdays with three times higher ride requests than weekends, focus on Wednesdays and Fridays for increased demand, and apply surge pricing during peak hours at 9 am, 8 am, 5 pm, and 4 pm. Utilize a dynamic pricing algorithm, maintain transparent communication, monitor performance, and stay competitive to optimize revenue while ensuring user satisfaction.