metrocar

ENHANCING THE USER JOURNEY

FUNNEL ANALYSIS AND RECOMMENDATIONS FOR METROCAR'S RIDE-SHARING PLATFORM

A written Report

Prepared by
Muhammad Tareq Mahmud

TABLE OF CONTENT

Project Background and Context:

Metrocar is a ride-sharing app that connects riders with drivers through a user-friendly mobile application. As an intermediary platform, Metrocar aims to provide a seamless ride-hailing experience for its users. To ensure continuous improvement and optimization of their services, Metrocar has initiated the Funnel Analysis Mastery Project. This project involves analyzing the customer funnel of Metrocar to identify areas where the user journey can be enhanced and streamlined.

Metrocar's customer funnel consists of several stages, including app download, signup, ride request, driver acceptance, ride, payment, and review. At each stage, there is potential for users to drop off, which can indicate pain points or areas requiring improvement. By conducting a comprehensive funnel analysis, Metrocar aims to gain valuable insights into user behavior and identify opportunities for enhancing the customer experience.

Objective

The main objective of the Funnel Analysis Mastery Project is to analyze Metrocar's customer funnel using SQL for data analysis and either Tableau or Google Sheets for data visualization. The project aims to answer the stakeholders' business questions and provide actionable recommendations based on the insights obtained from the data analysis.

The stakeholders have raised specific business questions that will guide the analysis and uncover valuable insights for improving specific areas of the customer funnel. By addressing these questions, the project aims to identify bottlenecks, drop-off points, and areas of potential friction within the funnel. These findings will enable Metrocar to make informed decisions and implement targeted strategies to optimize user engagement, increase conversion rates, and enhance the overall ride-hailing experience.

Through a comprehensive analysis of the dataset, the project will provide Metrocar with actionable recommendations to address the identified pain points and improve the customer funnel. The recommendations will be supported by insights derived from the data, enabling Metrocar to prioritize initiatives that will have the greatest impact on customer satisfaction, retention, and growth.

By leveraging the power of data analysis and visualization, the Funnel Analysis Mastery Project aims to empower Metrocar with the knowledge and insights necessary to optimize their ride-sharing platform, drive user engagement, and deliver an exceptional experience to riders and drivers alike.

Deliverables

- **Funnel Analysis Report:** A comprehensive report that presents the findings of the funnel analysis conducted on Metrocar's customer funnel. The report should include insights and recommendations based on the analysis, addressing the stakeholders' business questions. It should provide a detailed overview of each stage of the funnel, highlighting drop-off points, conversion rates, and areas for improvement.

- **Data Analysis:** A detailed analysis of the dataset using SQL. This analysis should cover various aspects of the customer funnel, including app downloads, sign-ups, ride requests, driver acceptance, rides, payments, and reviews. The analysis should provide insights into user behavior, conversion rates, platform performance, age group dynamics, and other relevant metrics.

- **Data Visualizations:** Visual representations of the funnel analysis using either Tableau or Google Sheets. The visualizations should effectively communicate the key findings and trends identified in the data analysis. They should include charts, graphs, and other visual elements that help stakeholders understand the data and draw meaningful conclusions.

- **Recommendations:** Actionable recommendations based on the insights derived from the data analysis. These recommendations should address the areas for improvement and optimization identified in the customer funnel. They should be supported by the data insights and provide clear steps that Metrocar can take to enhance the user experience, increase conversion rates, and improve overall business performance.

- **Presentation:** A presentation summarizing the findings, insights, and recommendations from the funnel analysis. This presentation should be visually appealing, concise, and well-structured to effectively communicate the key points to stakeholders. It should highlight the most important findings, explain the rationale behind the recommendations, and provide an opportunity for stakeholders to ask questions and engage in discussions.

Analysis Approach and Results

To conduct the funnel analysis of Metrocar, the provided dataset was accessed using the provided link and SQL was used for data exploration. Several initial questions were answered to understand the validity of the dataset and gain insights into the data. These questions included identifying the steps of the funnel that required research and improvement and identifying specific drop-off points that prevented users from completing their first ride.

Additionally, the analysis focused on understanding the performance of different platforms (iOS, Android, and web) to recommend where to focus the marketing budget. Age groups were also analyzed to determine their performance at each stage of the funnel and identify the target customer age group. The distribution of ride requests throughout the day was examined to provide insights into surge pricing strategies.

To conduct the funnel analysis, SQL was used to compute statistics and extract insights for each stage of the funnel. The 'WITH' statement in SQL was utilized to gather insights for each funnel stage, and the 'UNION' operation was employed to combine the results sequentially according to the funnel stages. The resulting insights were then exported as a CSV file for further analysis and visualization.

Tableau was used to visualize the funnel analysis data. Worksheets were created in Tableau based on the extracted insights from the CSV file. These worksheets facilitated the visualization of key metrics such as customer retention rate, customer drop-off rate, app downloads by age group and platform, user count in each funnel stage by age range, app download trends by different platforms, and more. The worksheets were then utilized to build interactive dashboards, and these dashboards were combined to create a comprehensive story that presented the findings and recommendations derived from the funnel analysis.

Overall, the analysis provided valuable insights into the Metrocar customer funnel. It identified areas for improvement, and highlighted platform performance, age group dynamics, and ride request distribution patterns throughout the day. These insights will guide decision-making to optimize the customer funnel, enhance user experience, and drive business growth for Metrocar.

Insights for Optimization

Customer Retention/Dropoff (Percentage of Previous and Percentage of Top):

The analysis of customer retention and dropoff rates reveals interesting insights. When considering the Percentage of Previous (POP) metric, we observe that approximately 51% of users successfully complete rides and payments. However, it is worth noting that the feedback rate is high at around 70%, suggesting that there is potential to improve conversion rates and leverage user feedback to enhance the overall user experience and engagement.

On the other hand, analyzing the Percentage of Top (POT) metric, we find that 52.55% of users request rides, but only 26.40% of them complete the payment process. This indicates a significant dropoff in conversion rates and emphasizes the need to focus on improving the customer journey and increasing the feedback rates, which currently stand at 18.42%.

Further investigation is required to understand why 50.77% (6,233 users) of the users complete the ride despite 12,278 users initially requesting the ride. Identifying the reasons behind this dropoff and finding ways to optimize the customer experience during the ride could lead to improved retention rates and overall satisfaction.

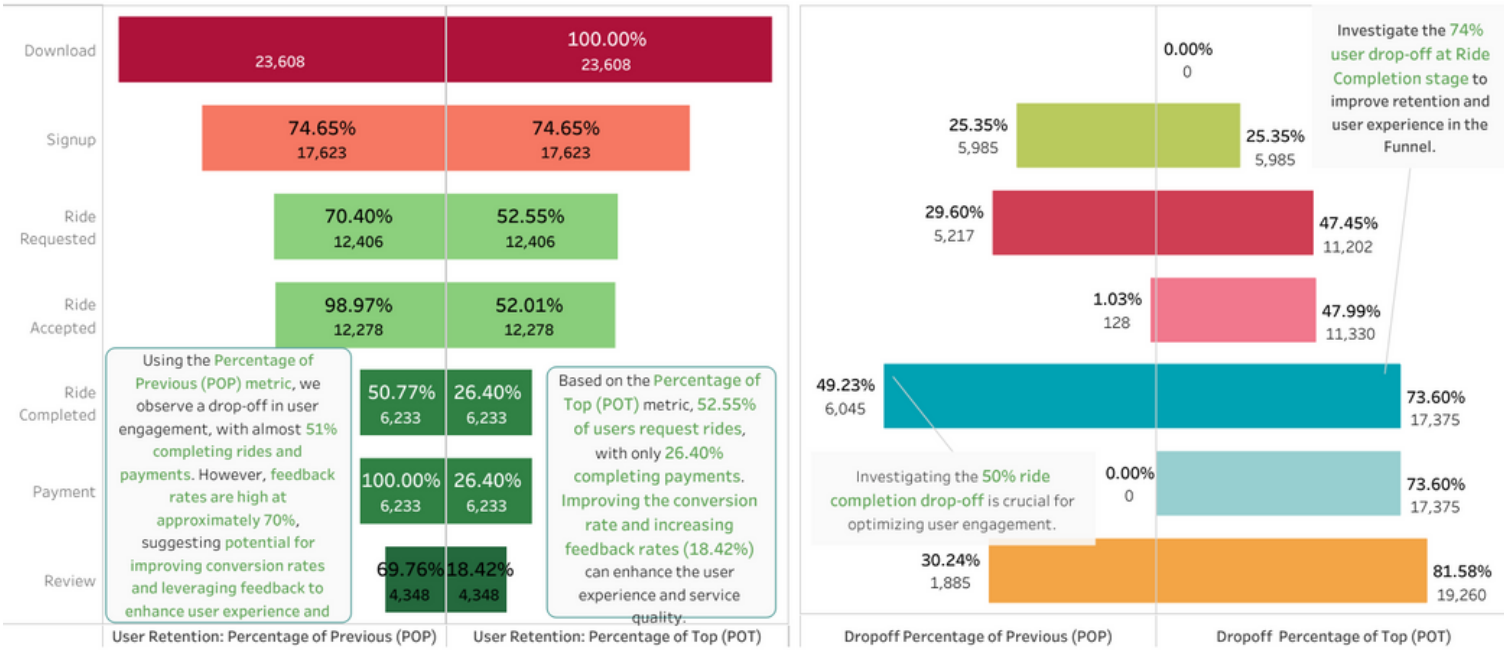

Figure 1:Funnel User Retention and Dropoff Analysis: Percentage of Previous (POP) and Percentage of Top (POT)

App Downloads by Age Groups and Platforms

The visualization of app downloads by age groups reveals that regardless of age, iOS dominates as the preferred platform for downloading the Metrocar app, accounting for over 60% of users. Android follows as the second most popular platform. It is important to consider these trends when devising marketing strategies and allocating budgets for the upcoming year

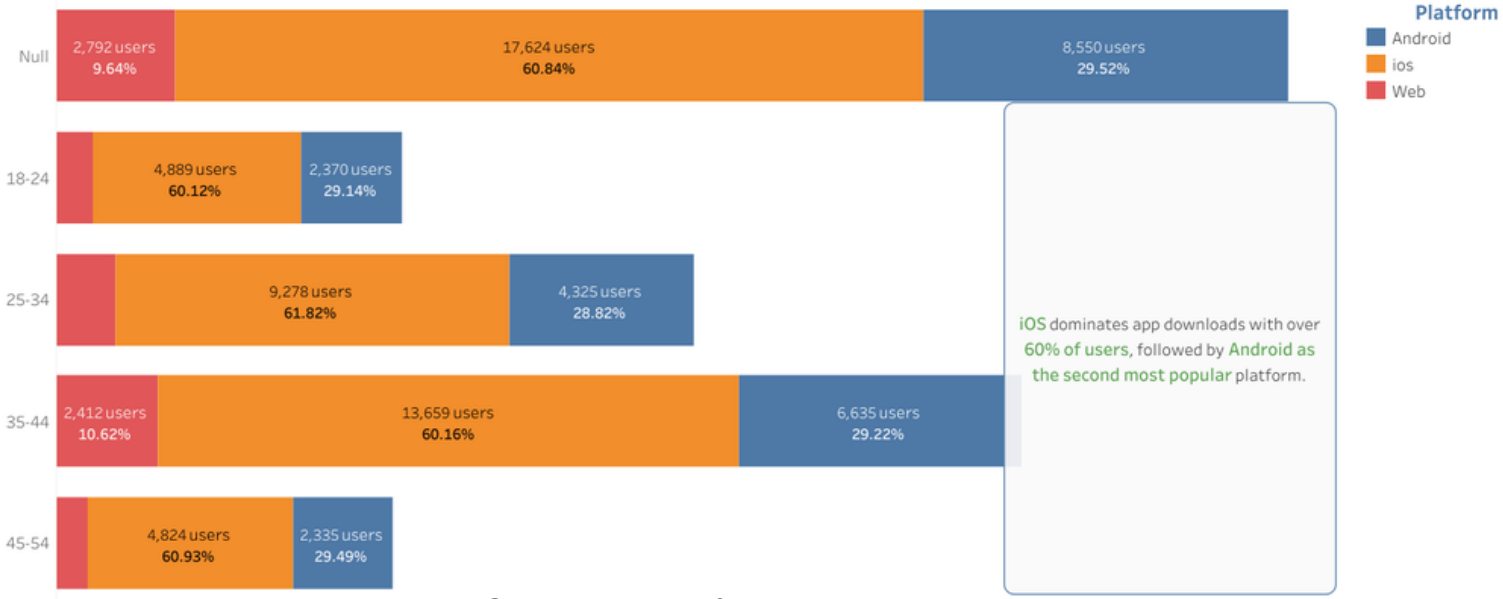

Figure 2: App Downloads by Age Groups and Platforms

Number of User Counts in Each Funnel Stage by Age Range

Examining the number of user counts in each stage of the funnel by age range, we find that the highest number of users falls within the 35-44 age group, closely followed by the 25-34 age group. However, it is worth noting that a significant number of users did not provide their age information, resulting in a dominant number of null values in the dataset. This highlights the importance of addressing data completeness and accuracy to obtain more precise insights.

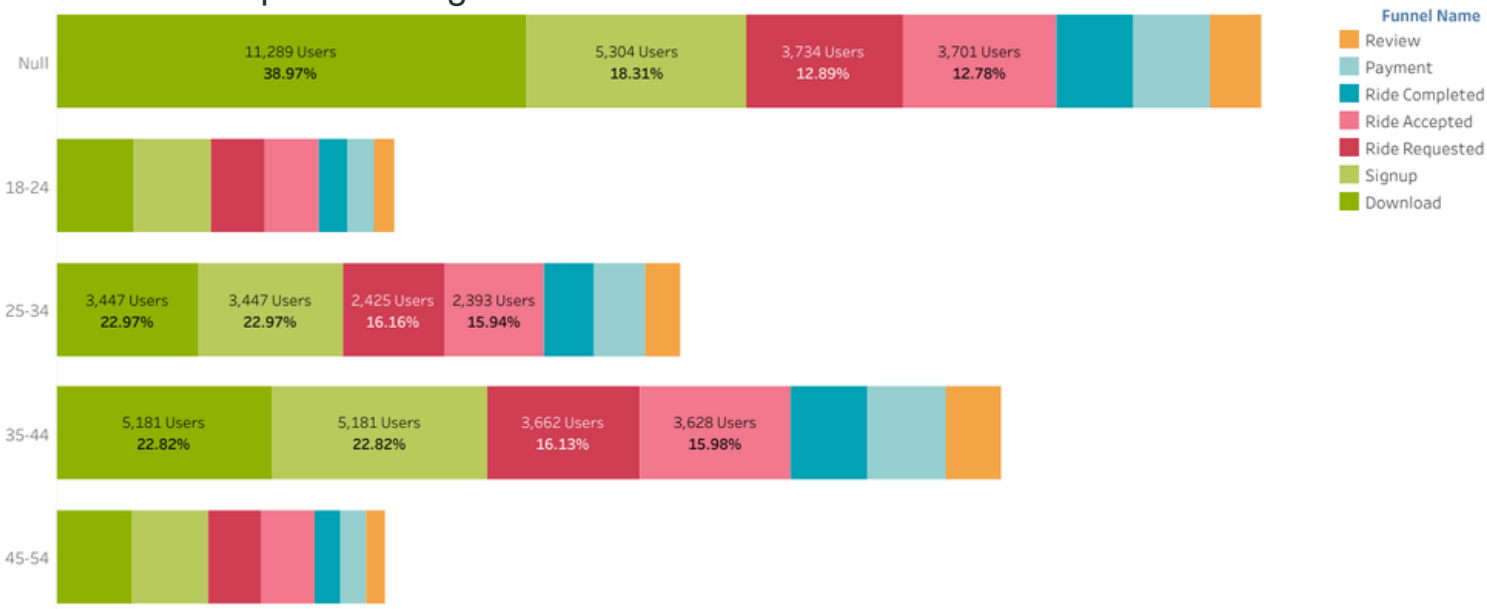

Figure 3:Number of User Counts in Each Funnel Stage by Age Range

App Download Trends Using Different Platforms

The analysis of app download trends reveals that iOS platform users dominate the app downloads, followed by Android platform users. This highlights the need to focus on providing an optimal experience for iOS users while also ensuring a seamless experience for Android users to capture a broader user base.

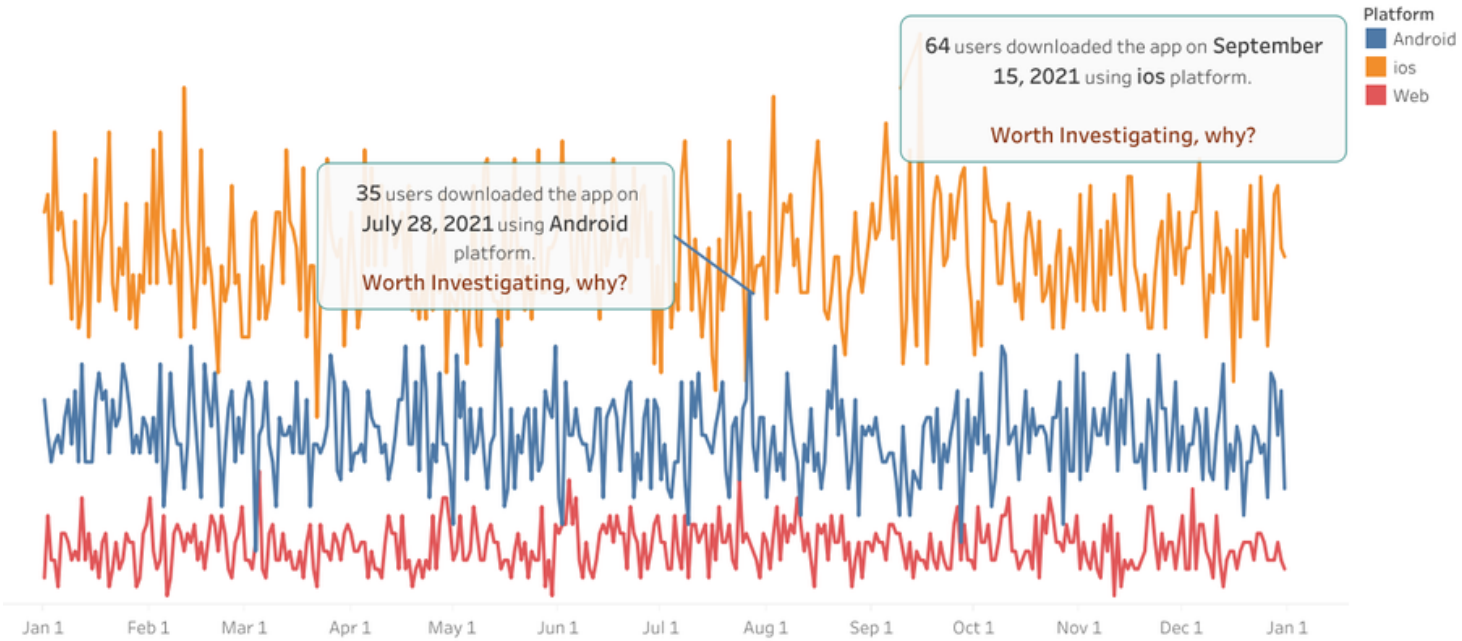

Figure 4:App Download Trends Using Different Platforms

Ride Counts by Platforms

The analysis of ride counts by platforms shows that iOS remains the dominant platform, accounting for approximately 61% of rides. When combining the ride counts of Android and iOS, these two platforms cover almost 90% of the total rides. Understanding platform preferences and optimizing the app's performance and features for each platform can contribute to improving the overall user experience and engagement.

Figure 5:Ride Counts by Platforms

Revenue Generation Segmentation by Age Groups/Platforms

Considering revenue generation, iOS platform users play a significant role, accounting for the majority of revenue. The 25-34 and 35-44 age groups, primarily using iOS, contribute approximately 43% of the total revenue, amounting to 1,280,871 USD. Regardless of the platforms used, the 35-44 age group generates the most revenue, followed by the 25-34 age group. These insights highlight the importance of these age groups in shaping Metrocar's financial performance.

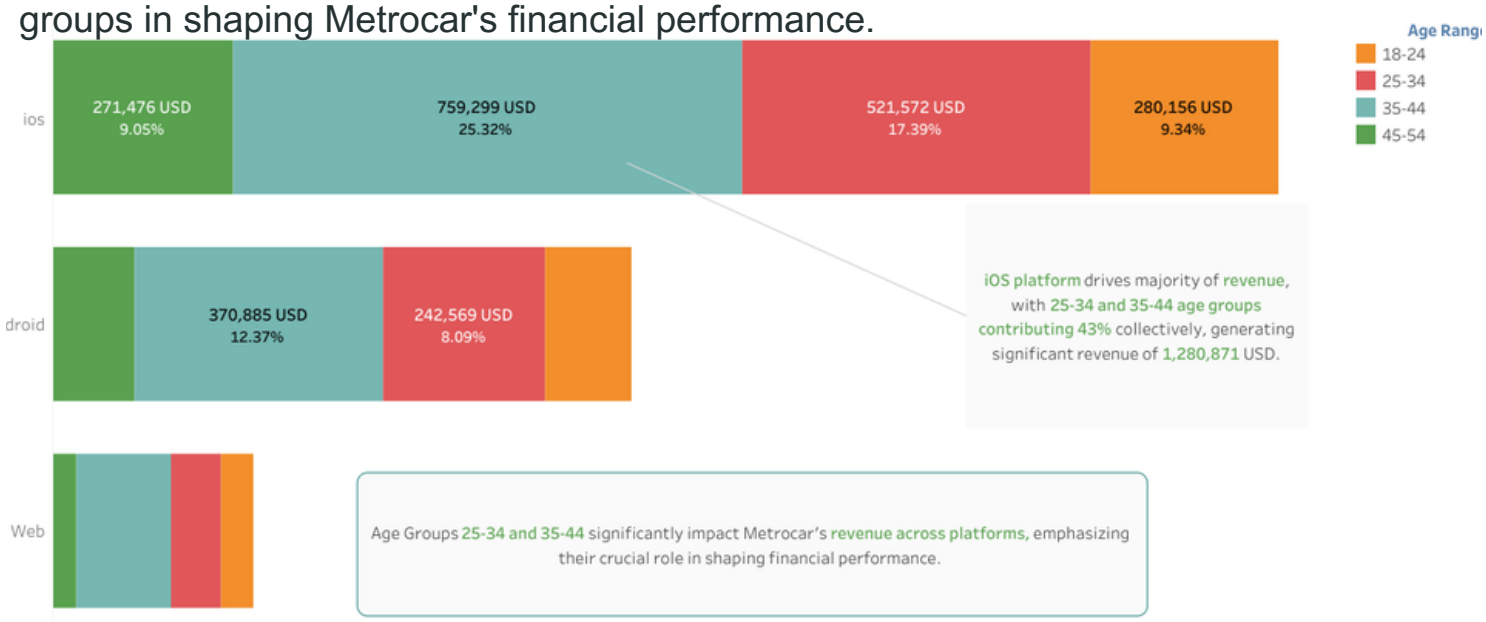

Figure 6:Revenue Generation Segmentation by Age Groups/Platforms

Percentage of Revenue Generated by Age Group

Analyzing the percentage of revenue generated by age group, we find that the 35-44 age group contributes 30% of the total revenue, while the 25-44 age group collectively contributes nearly 50%. This underscores the significant financial impact of these age groups and emphasizes the need to target and cater to their preferences and expectations.

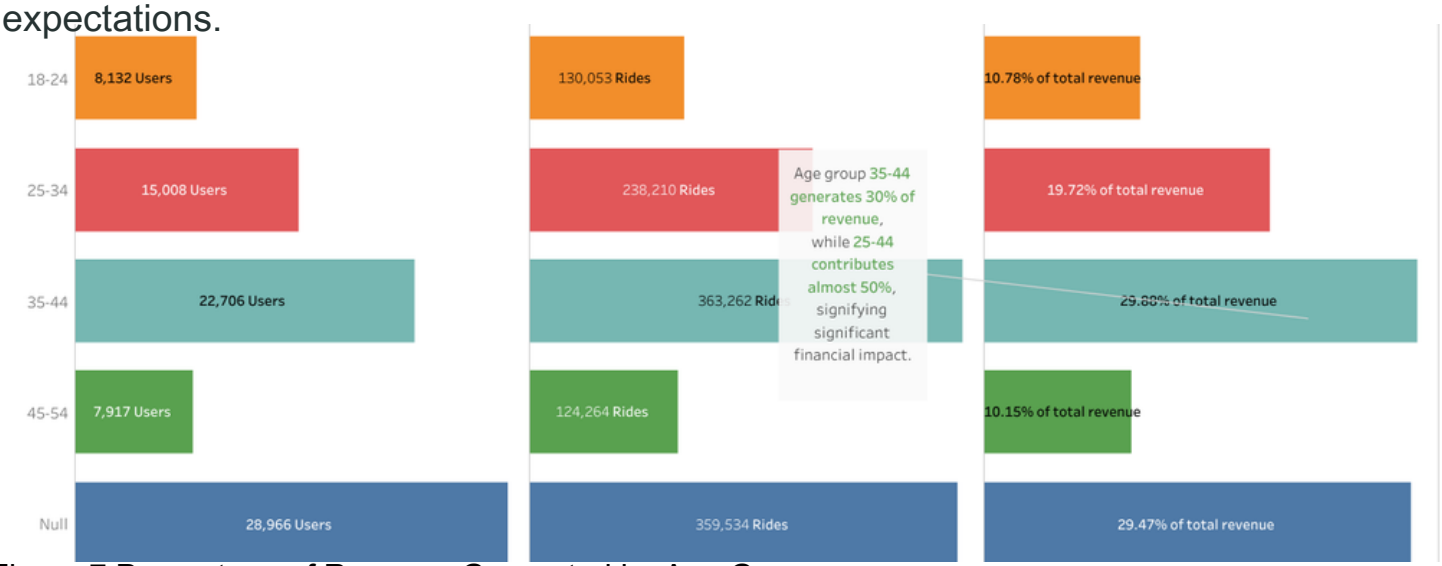

Figure 7:Percentage of Revenue Generated by Age Group

In summary, these data insights and visualizations provide valuable information for Metrocar to understand customer behavior, improve the funnel conversion rates, allocate marketing resources effectively, and enhance the overall user experience. By addressing the identified dropoff points, optimizing the customer journey, and targeting key age groups and platforms, Metrocar can drive revenue growth and improve customer satisfaction and retention.

Recommendations

Improve Conversion Rates and Feedback Engagement

- Address the drop-off in conversion rates between ride requests and completed payments (POT metric). Identify the reasons behind this drop-off and optimize the customer journey during the payment process.

- Leverage the high feedback rate (POP metric) to gather valuable insights and enhance the overall user experience. Actively encourage users to provide feedback and use it to drive improvements in service quality.

Enhance the Customer Journey and Ride Experience

- Investigate why a significant number of users complete the ride despite not initially requesting it. Identify potential pain points during the ride and work on optimizing the user experience to increase satisfaction and retention.

- Implement measures to improve the ride completion drop-off (74% user drop-off at Ride Completion stage). This may involve streamlining the payment process, providing clear communication during the ride, and ensuring a smooth drop-off experience.

Target Marketing Efforts Based on Platform and Age Group

- Allocate marketing budget and resources based on the app download trends by platform. While iOS dominates, ensure a seamless experience for Android users to capture a wider user base.

- Focus marketing efforts on the 35-44 and 25-34 age groups, as they contribute significantly to revenue generation. Craft targeted campaigns and promotions tailored to their preferences and expectations to maximize engagement and conversions.

Optimize App Performance and Features

- Continuously improve the performance and features of the Metrocar app, particularly for iOS users who constitute the majority of app downloads and revenue generation. Prioritize user experience enhancements, such as faster load times, intuitive navigation, and seamless booking and payment processes.

- Gather user feedback and conduct user testing to identify pain points and areas for improvement. Regularly release updates and bug fixes to address user concerns and provide a smooth, reliable app experience.

Ensure Data Completeness and Accuracy

- Address the issue of missing age data by implementing measures to encourage users to provide their age during the signup process. This will enhance the accuracy of age-related insights and segmentation, enabling better targeting and decision-making.

- Regularly review data collection processes to ensure completeness and accuracy throughout the entire customer funnel. This will provide a more reliable basis for analysis and enable more informed business decisions.

By implementing these recommendations, Metrocar can enhance user engagement, improve conversion rates, optimize the customer journey, and drive revenue growth. Continuous monitoring of key metrics and feedback will help identify further areas for improvement and ensure a successful and satisfying ride-sharing experience for their users.

Appendix: sql code

Please find the SQL code in the Microsoft Word Document (.docx) file attached to the zip folder. The name of the MS word document file is **'SQL Code used to extract Funnel Insights'**