**Project Title:**

**“A Project to Analyze the Customer Funnel of a Metro car Ride Sharing App (similar to Uber or Lyft) to Identify Areas for Improvement and Optimization”.**

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**Executive summary**

1. The need to prioritize further optimization of the iOS app due to its dominance, tailoring features to iOS preferences and ensuring compatibility. While iOS is leading, strategic investments in Android and web improvements are essential to enhance overall user experience.

2. Tailoring marketing efforts to the 35-44 age group, the most active user segment, to significantly boost engagement, satisfaction, and overall user retention.

3. Addressing a significant drop in the conversion rate, particularly from payment to the review stage, as a critical bottleneck. Resolving this issue is crucial for improving the customer funnel's efficiency and increasing user retention through streamlined processes, reduced friction, and encouragement to complete the entire funnel.

4. Recognizing specific peak times for ride requests and ensuring optimal service during these periods. This involves resource allocation, system efficiency improvements, and enhancing the user experience, particularly during high-traffic hours at 4:21:00 PM and 9:07:46 AM.

5. Advocating for a proactive approach, stakeholders are advised to regularly monitor user trends, platform preferences, and customer funnel performance. Employing adaptive strategies to respond to changing user behaviours and market dynamics is crucial for sustained growth and user satisfaction.

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1. **Introduction**

Metro Car operates within a dynamic and evolving business landscape, driven by a business model cantered around a seamless platform connecting riders with drivers through a user-friendly mobile application. Positioned as a trusted intermediary in the ride-hailing industry, Metro Car plays a pivotal role in facilitating convenient, efficient, and reliable transportation solutions for its diverse customer base.

At the core of Metro Car's business model is its innovative mobile application, designed to streamline the entire ride-hailing process. Through the app, riders have the convenience of requesting rides with just a few taps on their smartphones, providing them with real-time access to a network of skilled and vetted drivers.

**2.0. Problem statement**

In response to stakeholder inquiries, the company has identified key business questions aimed at gaining deeper insights into specific aspects of the customer funnel. These questions serve as the foundation for conducting a comprehensive customer funnel analysis, with the overarching goal of identifying opportunities for enhancement and optimization in the targeted areas of interest.

The problem statement revolves around addressing these critical business questions through a systematic examination of the customer journey, from initial engagement to final conversion. By conducting a thorough customer funnel analysis, the company aims to unearth valuable insights that can inform strategic decision-making and drive improvements in key performance metrics.

**3.0. Funnel Analysis**

**Funnel analysis** isa method of data analysis used to track and understand the sequential steps or stages that users or customers go through when interacting with a product, service, or website. It's called a "funnel" because the shape of the analysis resembles that of a real-world funnel-wide at the top and narrow at the bottom. However, it could also be easily represented by a bar chart.

Funnel analysis allows businesses and organizations to identify where users drop off or convert, helping them to ultimately increase desired outcomes, such as sales, sign-ups, or conversions. It is widely used in e-commerce, marketing, and product development to drive growth and revenue.

A diagram of a sales funnel

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Fig. 3.0: A Typical Sample of the Customer Funnel. Source: Lecture slide.

**4.0. Objective of the use of funnel analysis for the Project**

The key objective of the project is to perform a comprehensive customer funnel analysis to derive valuable insights and effectively respond to the identified business questions.

Specifically, the project aims to:

1.Research and pinpoint specific drop-off points in the customer funnel that prevent users from completing their first ride. Understand and address potential friction points in the application download to sign-up process to facilitate a seamless user journey.

2.Analyze platform-specific data to recommend where to focus the marketing budget for the upcoming year. Provide insights into user behavior on iOS, Android, and the web, guiding stakeholders in tailoring marketing efforts to the most promising platforms for user acquisition and.

3.Investigate and determine which age groups perform best at each stage of the customer funnel. Identify age groups that likely contain the target customer base, enabling more effective and targeted marketing strategies to capture and retain the most valuable users.

4.Examine the distribution of ride requests throughout the day to inform the adoption of a surge pricing strategy. Understand peak demand times to optimize pricing dynamically, maximizing revenue during periods of high user activity.

5.Identify the part of the customer funnel with the lowest conversion rate and develop strategies to improve this specific stage. Implement interventions that streamline processes, reduce friction, and enhance user satisfaction to drive higher completion rates.

**5.0. Significance of the Project**

The customer funnel in the Metro car project holds significant importance for various reasons.

* It serves as a critical tool for understanding how Metro car business attracts and onboards customers.
* By analysing the customer funnel, the business can identify areas where it can reduce acquisition costs and improve conversion rates, which directly impacts profitability and the return on investment for stakeholders.
* Understanding the funnel allows stakeholders to compare its user acquisition and retention strategies to competitors like Uber and Lyft, enabling the company to learn from best practices and stay competitive.
* The funnel provides insights into growth potential, helping stakeholders to identify which stages of the customer journey may require more attention or resources to expand its user base and market share.
* The customer funnel empowers the business with valuable data to make informed decisions, refine marketing strategies, and enhance the overall customer experience. This data-driven approach can lead to better decision-making and a more successful business operation.

**6.0. Methodology**

The Metro Car database serves as a foundational source of valuable data, accessed, and queried using SQL (Structured Query Language) to retrieve relevant datasets. These datasets, crucial components of the aggregate data for analysis, were then extracted and downloaded in the widely compatible CSV (Comma-Separated Values) file format within Microsoft Excel.

This initial phase of data preparation involved cleaning, organizing, and structuring the datasets to ensure accuracy and consistency. Missing values, inconsistencies, and outliers were addressed to maintain data integrity and reliability for subsequent analysis.

Upon completion of data preparation, the datasets underwent a series of advanced analytical techniques to derive enhanced insights. This included exploratory data analysis (EDA) to uncover patterns, trends, and correlations within the data. Statistical methods, such as descriptive statistics and inferential analysis, were employed to gain a deeper understanding of the dataset's characteristics.

The results of these analyses were then translated into visually compelling and informative presentations using Tableau, a powerful data visualization tool. Tableau's intuitive interface and robust features allowed for the creation of dynamic and interactive dashboards, charts, and graphs.

Through the visual representation of the analysed data on Tableau, stakeholders and decision-makers were provided with a comprehensive and accessible resource for informed decision-making. Key metrics, performance indicators, and trends were effectively communicated through visually appealing graphics, facilitating a deeper understanding of the dataset's insights.

Furthermore, the Tableau dashboards offered the flexibility to drill down into specific data points, filter results based on various criteria, and compare trends across different dimensions. This level of interactivity empowered users to explore the data from multiple perspectives, gaining valuable insights tailored to their specific needs.

The table below provides a summary of the sizes of the datasets for the funnel items, retrieved from the Metro Car database using SQL queries. These datasets served as the foundation for subsequent analysis and visualization, offering valuable insights into the customer journey and behaviour within the Metro Car platform.

|  |  |  |  |
| --- | --- | --- | --- |
| **Funnel\_step** | **Funnel\_name** | **user\_count** | **Ride\_count** |
| 0 | download | 23608 |  |
| 1 | signup | 17623 |  |
| 2 | ride\_requested | 12406 | 385477 |
| 3 | ride\_accepted | 12278 | 248379 |
| 4 | ride\_completed | 6233 | 223652 |
| 5 | payment | 6233 | 212628 |
| 6 | Review | 4348 | 156211 |

Fig. 6.0. Dataset table user count. Own source

**7.0. Customer Funnel Analysis visualization of Metro car Business**

A graph with colorful squares

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Fig. 7.0. Own Source: Tableau. Metro Car Customer Funnel Analysis

* Download: 23608 is the total number of individuals who downloaded the Metro Car app from the App Store or Google Play Store with an iOS phone, Android device, or through the web.
* Signup: 17623 is the total number of users who create an account in the Metro car app, including their name, email, phone number, and payment information.
* Request Ride: 12406 are the users who open the app and request a ride by entering their pickup location, destination, and ride capacity.
* Driver Acceptance: The funnel shows that 12,278 ride requests were accepted by the metro car drivers.
* Ride completed: The funnel shows that 6233 rides requested were completed by the drivers to the destination of the users.
* Payment: 6233 is the total number of users that were successfully charged automatically through the app, and a receipt is sent to their email.
* Review: 4348 is the total number of users who were prompted to rate their driver and leave a review of their ride experience.

**8.0. Analysis of the Stakeholders’ business questions.**

Metrics and Key Performance Indicators (KPIs) serve as valuable tools, offering insights into the performance of crucial customer funnel activities aligned with business inquiries. These data-driven metrics empower businesses to make informed decisions aimed at enhancing overall performance.

The subsequent analysis delves into stakeholders' business questions, utilizing these business metrics to provide comprehensive insights and inform strategic decision-making.

**8.1. Stages of the Customer funnel requiring improvement in the Business.**

Identifying areas for enhancement in the customer funnel involves focusing on three specific stages. The analysis employs the "percent of previous stage" approach, chosen for its normalized perspective, facilitating meaningful comparisons and the identification of performance trends. This method allows businesses to evaluate relative conversion rates at each stage, providing valuable insights into the effectiveness of the customer journey.

1.Application downloads to sign-up stage.

The drop in conversion from application download to sign-up, from 100% to 74.65%, suggests potential challenges or barriers in the user onboarding process; several factors could contribute to this difference as highlighted below: and indicate areas for improvement:

* The onboarding process may not be intuitive or user-friendly, leading to users abandoning sign-up midway.
* Users might lack trust in the application or have concerns about data security, impacting their willingness to sign up.
* Glitches, bugs, or technical errors during the sign-up process may frustrate users and lead to abandonment.
* If the application is not optimized for various devices, it could hinder users from signing up on certain platforms.
* The sign-up process may have unnecessary complexities, deterring users from completing the registration.
* Insufficient or ineffective communication about the sign-up process and its benefits may contribute to the drop-off.

2. Ride accepted to Ride completed stage.

The significant drop in the conversion rate from ride acceptance (98.97%) to ride completion (50.77%) indicates potential challenges in the execution and fulfilment stages of the customer funnel. Several factors could contribute to this difference and signal areas for improvement:

* A shortage of available drivers might lead to accepted rides not being fulfilled, impacting completion rates.
* Issues with the routing or navigation system could cause delays or difficulties in completing rides.
* Poor communication between drivers and users may lead to misunderstandings, cancellations, or incomplete rides.
* Riders may have experienced subpar service during the ride, influencing their decision to discontinue the trip.
* Technical issues within the application, such as payment processing or connectivity problems, could hinder the completion of rides.
* Unpleasant in-ride experiences, such as uncomfortable vehicles or unprofessional behaviour, can impact ride completion.
* Users might feel unsafe during the ride, prompting them to terminate the trip prematurely.

3. Payments to review stage.

The review stage provides necessary feedback that would help the stakeholders and management review their strategy and operations for better performance based on feedback received from users. In this step, the drop in conversion from the total number of payments (100%) to the total number of reviews (69.76%) suggests that there might be challenges in encouraging users to provide feedback after completing a payment. Several factors could contribute to this difference and indicate areas for improvement:

* Users may not be prompted or encouraged to leave reviews after making a payment.
* If the payment process is cumbersome or confusing, users might be less inclined to provide positive feedback.

**8.2**.  **Application platform device**

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Fig. 8.2. Own Source: Tableau. Metro Car Application Platform

Figure 8.2 presents a detailed pie chart that offers insights into the distribution of user application platforms and their corresponding usage percentages within the Metro Car platform. The chart sheds light on the preferences and behaviors of Metro Car users across different device platforms, providing valuable data for strategic decision-making and platform optimization.

Key findings from the pie chart analysis include:

1. **iOS Phone Dominance**: The chart reveals that the iOS phone emerges as the dominant platform among Metro Car users, capturing a substantial 60.88% share of the total usage. This indicates that most Metro Car users prefer to access the platform through iOS devices, such as iPhones.
2. **Usage Frequency**: Users on the iOS platform accessed the Metro Car application a total of 237,871 times during the analyzed period. This high frequency of usage underscores the popularity and preference for the iOS ecosystem among Metro Car's customer base.
3. **Android Phone Usage**: In comparison, the Android phone platform accounts for 29.14% of the total usage, reflecting a significant user base of 113,846 instances. While slightly lower than iOS, the Android platform remains a substantial segment of Metro Car's user demographic.
4. **Web Platform Usage**: The analysis also highlights the usage of the web platform, which accounts for 9.98% of the total. This indicates that a smaller but notable portion of Metro Car users opt to access the platform through web browsers on their desktop or mobile devices.
5. **Preference Disparity**: The stark contrast between iOS and Android usage, with iOS leading by 60.88% over Android, emphasizes the significant preference Metro Car users have for the iOS ecosystem. This preference may be influenced by factors such as user experience, app availability, and device familiarity.

Overall, the pie chart analysis provides a clear visual representation of the distribution of user application platforms within Metro Car's user base. The substantial dominance of the iOS phone platform, followed by Android and web platforms, offers valuable insights into user preferences and behaviors.

These findings can inform Metro Car's strategic decisions regarding platform optimization, feature development, and marketing initiatives. By catering to the preferences of the majority iOS users while also addressing the needs of Android and web users, Metro Car can enhance user engagement, improve customer satisfaction, and ultimately drive business growth.

Top of Form**8.3. Age Group performance**

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Fig. 8.3. Own Source: Tableau. Metro car Age group performance

Figure 8.3 provides a comprehensive overview of the age distribution among users of the Metro Car mobile application, offering valuable insights into the demographics of the platform's user base. The analysis of age groups and their corresponding app usage highlights key trends and user preferences that can inform strategic decisions and tailored marketing efforts.

Key insights from the age distribution analysis include:

1. **35–44 Age Group Dominance**: The chart reveals that the age group 35–44 emerges as the most frequent users of the Metro Car app, constituting a significant 29.62% of the total user base. This demographic segment demonstrates robust engagement, utilizing the app a total of 115,728 times during the analysed period.
2. **25–34 Age Group**: Following closely behind is the age group 25–34, representing 19.52% of the user base. With 76,258 users in this segment, it presents a substantial portion of Metro Car's active user demographic, indicating a strong appeal among young to mid-aged adults.
3. **18–24 and 45–54 Age Groups**: The analysis also highlights the engagement of the 18–24 and 45–54 age groups, which contribute 10.54% and 10.30% of the user base, respectively. These segments, while slightly smaller in proportion, still represent significant user demographics for Metro Car.
4. **'Unknown' Age Group**: The 'unknown' age group, categorized under GDPR regulations, accounts for 30.02% of the total user base. However, due to the unassignable nature of this group to specific age brackets, it was excluded from the analysis to maintain the accuracy and integrity of the results.
5. **Significance of 35–44 Age Group**: The analysis underscores the significance of the 35–44 age group within Metro Car's user base. This demographic segment not only constitutes the largest portion of users but also demonstrates the highest level of engagement with the app.

By focusing on the preferences and behaviours of the 35–44 age group, Metro Car can tailor its app features, marketing campaigns, and user experiences to better meet the needs and preferences of this key demographic. Additionally, insights into the other age groups provide opportunities for targeted strategies to engage younger and older users effectively.

The exclusion of the 'unknown' age group ensures that the analysis remains focused and accurate, preventing potential distortion or bias in the presented results. This attention to detail enhances the reliability of the information presented to stakeholders, enabling informed decision-making and strategic planning for Metro Car's continued growth and success.

**8.4. Ride Requests Distribution Outlook for the Day.**

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Fig. 8.4. Own Source: Tableau. Ride Request Distribution for the Day

Figure 8.4 presents a detailed line chart that visualizes the daily distribution of ride requests within the Metro Car mobile application. The chart showcases the fluctuations in ride request activity throughout the day, offering valuable insights into user behaviour and usage patterns.

Key insights from the line chart analysis include:

1. **Peak Request Times**:
   * The chart identifies two distinct peak periods during the day when ride requests reached their maximum:
     + Peak 1: Occurring at 4:21:00 p.m., the chart indicates a peak of 115 users requesting rides during this time. This late afternoon peak suggests a surge in demand for transportation services, possibly as users commute home from work or engage in leisure activities.
     + Peak 2: The second peak occurs at 9:07:46 a.m., with 111 users requesting rides. This morning peak likely corresponds to users commuting to work, school, or other early-morning activities.
2. **Usage Patterns**:
   * The chart provides a clear depiction of the fluctuations in ride requests throughout the day, illustrating the app's usage patterns.
   * In the early hours of the morning, ride requests are relatively low, indicating a period of reduced activity.
   * As the day progresses, ride requests steadily increase, reaching their first peak in the late morning.
   * Following a slight dip during midday, ride requests surge again in the late afternoon, marking the highest point of user activity.
   * The evening hours show a gradual decline in ride requests as the day ends.
3. **Insights for Operations**:
   * Metro Car can utilize these insights to optimize its operational strategies and resources.
   * By anticipating and preparing for the peak demand periods, Metro Car can ensure that an adequate number of drivers are available to meet user needs.
   * Special promotions, discounts, or incentives can be offered during off-peak hours to incentivize users and balance demand throughout the day.
   * The data can also inform marketing campaigns targeting specific times of the day when user engagement is highest, maximizing the impact of promotional efforts.
4. **User Behaviour Understanding**:
   * Understanding the peak request times provides Metro Car with valuable insights into user behaviour and preferences.
   * It allows the company to tailor its services and features to better accommodate user needs during these busy periods.
   * Features such as pre-booking rides, surge pricing notifications, and real-time driver availability updates can enhance the user experience during peak demand times.

In conclusion, Figure 8.4's line chart offers a comprehensive view of the daily distribution of ride requests within the Metro Car app. The identification of peak request times, insights into usage patterns, and implications for operational and marketing strategies make this analysis a valuable tool for optimizing user experience and service efficiency.

**8.5. Lowest conversion rate in the funnel**

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Fig. 8.5. Own Source: Tableau. Lowest conversion rate in the funnel

Figure 8.5 of the Metro Car customer funnel provides a detailed insight into the conversion rates at different stages of the user journey within the mobile application. The percentage-based analysis highlights a critical bottleneck at the 'payment to review' stage, indicating a substantial decline in user engagement or completion of the conversion process.

Key points to expand on this analysis include:

1. **Conversion Rate Analysis**:
   * The figure presents a percentage-based analysis of the conversion rates between the 'payment' and 'review' stages of the customer funnel.
   * A conversion rate of 69.76% signifies that nearly 70% of users who make payments within the Metro Car app do not proceed to the subsequent review stage.
   * This decline indicates a significant drop-off in user engagement or willingness to complete the desired action, which in this case is leaving a review after making a payment.
2. **User Experience Implications**:
   * The observed decline in conversion rates suggests potential challenges or barriers that users face when transitioning from the payment process to leaving a review.
   * Users may find the review process cumbersome, confusing, or simply not compelling enough to complete.
   * Factors such as unclear instructions, lack of motivation, or a disjointed user interface could contribute to the drop-off in engagement.
3. **Importance of Review Stage**:
   * The 'review' stage of the customer funnel is crucial for Metro Car as it provides valuable feedback, ratings, and testimonials from users.
   * Positive reviews and high ratings can significantly impact the app's reputation, user trust, and overall success.
   * Therefore, optimizing the 'payment to review' transition is essential for maximizing the number of users who leave feedback and contribute to the app's growth.
4. **Strategies for Improvement**:
   * Metro Car can implement several strategies to address the low conversion rate at the 'payment to review' stage.
   * Simplifying the review process by reducing steps and making it more intuitive can encourage more users to leave feedback.
   * Providing incentives such as discounts, rewards, or exclusive offers for leaving a review can motivate users to complete the action.
   * Clear and prominent call-to-action buttons and reminders within the app can prompt users to leave reviews after completing a transaction.
5. **Iterative Testing and Optimization**:
   * Adopting an iterative approach to testing and optimization is key to improving the 'payment to review' conversion rate.
   * Metro Car can conduct A/B testing of different review process variations to identify which design or flow resonates best with users.
   * Continuous monitoring of user feedback, app analytics, and conversion rates will help in refining the review stage over time.

In conclusion, Figure 8.5 of the Metro Car customer funnel reveals a critical area for improvement at the 'payment to review' stage, where there is a substantial drop in conversion rates. Addressing this bottleneck through user experience enhancements, incentives, and clear call-to-action prompts can lead to increased user engagement, more valuable feedback, and ultimately, improved app success.

**9.0. Recommendations to Stakeholders**

Following the analysis and findings addressing the business questions raised by stakeholders, the following recommendations are proposed:

1. Given the dominance of iOS usage, stakeholders should prioritize further optimization of the app, introducing features that cater to iOS users' preferences and ensuring compatibility with the latest iOS updates. While iOS is leading, there is a substantial user base on Android and the web. Stakeholders should invest in improvements for these platforms, addressing any identified issues to enhance user experience and increase usage.

2. Focus marketing efforts on the 35-44 age group, as they constitute the highest number of app users. Tailor promotions and campaigns to resonate with the preferences and needs of this age segment to further boost engagement.

3. Identify specific issues causing the significant drop in the conversion rate on each customer funnel stages specifically, from the payment to the review stage. Implement strategies to streamline this process, reduce friction, and encourage users to complete the entire customer funnel.

4. Since the ride requests peak at specific times (4:21:00 PM and 9:07:46 AM), stakeholders should ensure that the service is optimized during these hours to handle increased demand efficiently.

**10.0. Limitations in the A/B Test of the project**

During the age group analysis to assess performance in the utilization of the Metro car app, a noteworthy observation was made. Specifically, 30.02% of the data, comprising 117,299 users, lacked age information, and was classified under GDPR as the 'unknown' group in the analysis. This substantial portion of missing data raises concerns about the potential impact on the accuracy of our analysis and results, introducing the risk of bias.

The absence of age information for a significant number of users highlights the importance of acknowledging and addressing potential limitations in the data, ensuring a more comprehensive and reliable interpretation of the findings.

**11.0. Conclusion**

1. Tailor development, budget, and marketing strategies to the clear preference for iOS, which has a significantly higher usage percentage compared to Android and the web.

2.The 35-44 age group segment is the most active user group; align marketing and service improvements with their preferences and needs to enhance user satisfaction and retention.

3.The observed drop in conversion from payment to the review stage is critical; resolving this bottleneck is essential for improving overall customer funnel efficiency and increasing user retention.

4. Recognize peak times for ride requests and ensure the service can handle increased demand during these periods; optimization may involve resource allocation, system efficiency improvements, and enhancing user experience during high-traffic hours.

**12.0. References**

Below is the database table structure for Metro Car Business:

**app\_downloads**: contains information about app downloads

* + app\_download\_key: unique id of an app download
  + platform: ios, android or web
  + download\_ts: download timestamp.
* **signups**: contains information about new user signups.
  + user\_id: primary id for a user
  + session\_id: id of app download
  + signup\_ts: signup timestamp
  + age\_range: the age ranges the user belongs to
* **ride\_requests**: contains information about rides
  + ride\_id: primary id for a ride
  + user\_id: foreign key to user (requester)
  + driver\_id: foreign key to driver
  + request\_ts: ride request timestamp
  + accept\_ts: driver accept timestamp.
  + pickup\_location: pickup coordinates
  + destination\_location: destination coordinates
  + pickup\_ts: pickup timestamp
  + dropoff\_ts: dropoff timestamp
  + cancel\_ts: ride cancel timestamp (accept, pickup and dropoff timestamps may be null)
* **transactions**: contains information about financial transactions based on completed rides:
  + ride\_id: foreign key to ride
  + purchase\_amount\_usd: purchase amount in USD
  + charge\_status: approved, cancelled.
  + transaction\_ts: transaction timestamp
* **reviews**: contains information about driver reviews once rides are completed.
  + review\_id: primary id of review
  + ride\_id: foreign key to ride
  + driver\_id: foreign key to driver
  + user\_id: foreign key to user (requester)
  + rating: rating from 0 to 5
  + free\_response: text response given by user/requester.

**13.0. Appendix**

The appendix includes SQL codes and links to visualizations of metrics and key performance indicators (KPIs) on Tableau.

**SQL query code:**

1.Number of times the app was downloaded? (23,608)

SELECT COUNT (app\_download\_key) As app\_download\_count

FROM app\_downloads;

2. Number of times users signed up on the app (17,623)

SELECT COUNT (user\_id) As user\_count

FROM signups;

3. Number of times rides were requested through the app. (385,477)

SELECT COUNT (ride\_id) As ride\_count

FROM ride\_requests;

4. Number of rides requested and completed through the app. (ride requested is 385,477 and ride completed is 223,652).

SELECT COUNT (dropoff\_ts) as ride\_completed,

COUNT (request\_ts) as ride\_requested

FROM ride\_requests

ORDER BY ride\_completed;

5.Number of rides requested and number of unique users that requested a ride. (Ride requested is 385,477 and the unique user\_ids are 12,406).

SELECT COUNT (request\_ts) as ride\_requested,

COUNT (DISTINCT (user\_id)) as unique\_user\_id

FROM ride\_requests

ORDER BY ride\_requested;

7.Number of rides accepted by a driver. (248,379)

SELECT COUNT (accept\_ts) As count\_ride\_accepted

FROM ride\_requests;

8. Number of User ride accepted (12,278)

SELECT R.user\_id,COUNT(R.accept\_ts) As count\_ride\_accepted

FROM ride\_requests as R

JOIN metrocar AS M

ON R.accept\_ts=M.accept\_ts

GROUP BY R.user\_id

ORDER BY count\_ride\_accepted;

9.Number of rides that were successfully collected payments for and amount collected. (212,628 total rides, $4,251,667.61)

SELECT

COUNT (DISTINCT ride\_id) AS total\_rides\_requested,

ROUND (SUM (purchase\_amount\_usd)::NUMERIC,2)AS total\_amount\_collected

FROM transactions

WHERE charge\_status='Approved';

10. Number of unique users that completed a ride through the Metrocar app. (6233)

SELECT COUNT (DISTINCT user\_id) AS count\_distinct\_users

FROM metrocar

WHERE dropoff\_ts IS NOT NULL

ORDER BY count\_distinct\_users;

Query code for Age range and platform metrics

SELECT s.age\_range,m.platform,m.download\_ts,COUNT(s.user\_id)As user\_count

FROM signups As S

left Join metrocar As M

ON S.user\_id=M.user\_id

GROUP BY s.age\_range,m.platform,m.download\_ts

order by user\_count;

Query code for Distribution for ride requests

SELECT s.age\_range,m.platform,m.download\_ts,COUNT(R.ride\_id)As ride\_count

FROM signups As S

left Join metrocar As M

ON S.user\_id=M.user\_id

Join ride\_requests As R

ON M.ride\_id=R.ride\_id

GROUP BY s.age\_range,m.platform,m.download\_ts

order by ride\_count;

**Tableau Visualization Links:**

Metro car customer funnel analysis

<https://public.tableau.com/app/profile/ejikeme.justine.ekwem/viz/MetrocarFunnelAnalysis_16992188757090/MetrocarFunnelAnalysis?publish=yes>

Platform device analysis

<https://public.tableau.com/app/profile/ejikeme.justine.ekwem/viz/PlatformPerformanceAnalysis_16992298869300/Platform?publish=yes>

Age Group performance Analysis

<https://public.tableau.com/app/profile/ejikeme.justine.ekwem/viz/AgeGroupPerformanceAnalysis/AgeGroup?publish=yes>

Distribution of Ride Request

<https://public.tableau.com/app/profile/ejikeme.justine.ekwem/viz/DistributionofRideRequest/DistributionofRideRequest?publish=yes>

**Video presentation link**

[**https://www.loom.com/share/72a503b8ac884455830c29d00f6d5a85**](https://www.loom.com/share/72a503b8ac884455830c29d00f6d5a85)