

Cyclistic Bike-Share Case Study

How Data Can Drive Cyclistic's Membership Growth Strategy

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♦ Introduction: Unlocking Growths for Cyclistic

Business Challenge:

♦ Casual riders account for 45.54% of total rides but have a low membership conversion rate. Understanding their behaviour is key to increasing memberships.

Key Questions:

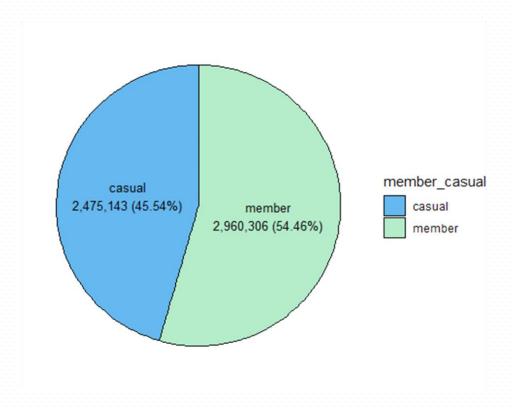
- What factors influence casual riders' decision to subscribe?
- ♦ How do their riding patterns differ from members, and how can we leverage this insight?
- ♦ What strategies can effectively convert casual riders into long-term members?

Approach:

- Data cleaning: To ensure data integrity and accuracy, duplicate ride IDs were removed and ride length was filtered.
- ♦ Analyze ride frequency, seasonal trends, and usage patterns.
- ♦ **Identify** when and how casual riders use Cyclistic bikes.
- ♦ **Develop** data-driven marketing strategies to increase membership sign-ups.

Total Rides During 2021:

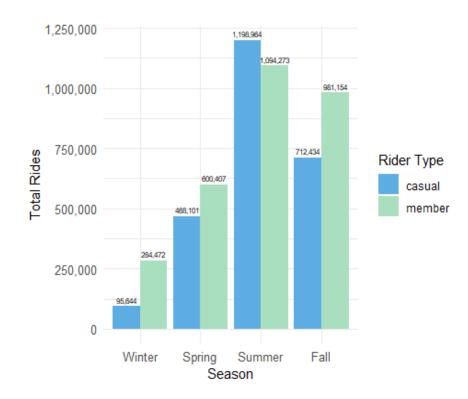
• Cyclistic recorded **5.4 million rides**, showing a strong demand for bikes in Chicago.



Seasonal Ride Patterns

- Understanding seasonal variations helps us see how ride activity changes across the year.
- Gasual riders peak in summer (June–August), but annual members have steady usage year-round.
- Lowest ridership occurs in winter (January– February).

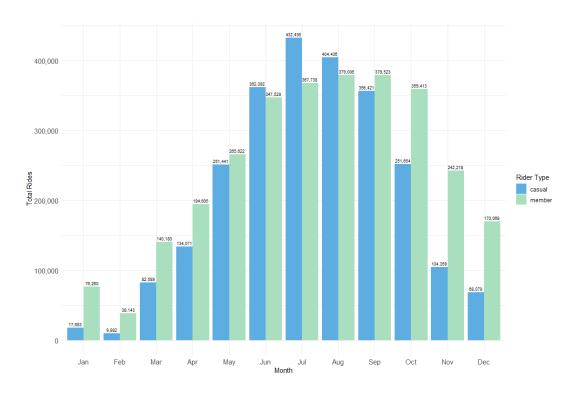
- Target summer promotions to convert casual riders into members.
- Develop winter engagement strategies to maintain ridership.



Monthly Ride Patterns: Key Insights

- III Summer months (June–August) drive the highest ridership, with a sharp drop in winter (January–February).
- Casual riders show extreme seasonality, while annual members ride consistently yearround.

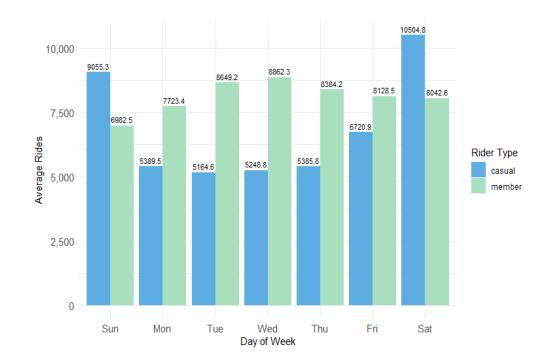
- Peak Season Strategy: Use targeted summer promotions to increase membership sign-ups.
- Off-Peak Strategy: Offer winter ride discounts or bundle deals to keep engagement steady.
- Transition Strategy: Spring (March–May) is the best time to start marketing membership plans before summer demand spikes.



Weekly Ride Patterns: Key Insights

- Casual riders peak on weekends (Saturday– Sunday), while annual members dominate weekday rides (Monday–Friday).
- Weekend rides are longer, while weekday rides are shorter and more frequent.

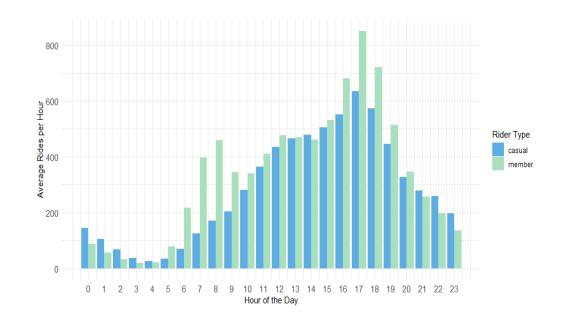
- Weekend Strategy: Offer longer ride packages or discounted weekend passes to attract casual riders.
- Weekday Strategy: Introduce morning/evening commute incentives (e.g., priority docking, ride credits for frequent users).
- Targeted Ads: Promote weekday membership benefits to commuters and adventure-based offers on weekends.



Hourly Ride Patterns: Key Insights

- III Two major ride peaks: Morning rush hour (7-9 AM) and evening commute (4-6 PM).
- Casual riders are more active in the afternoon and evenings (12-8 PM), while annual members ride mostly during commute hours.

- Commute Strategy: Offer morning ride discounts or priority docking for annual members to enhance retention.
- Leisure Strategy: Since casual-riders ride in the evening, introduce special evening ride promotions to boost engagement.
- Operational Planning: Ensure more bike availability at peak hours (e.g., repositioning bikes at major commute hubs).



Average Ride Duration by Day of the Week:

Key Insights

- Casual riders take significantly longer trips, especially on weekends (Saturdays & Sundays).
- Annual members have shorter, more consistent ride durations throughout the week.

Business Opportunity:

Weekend Pricing Strategy:

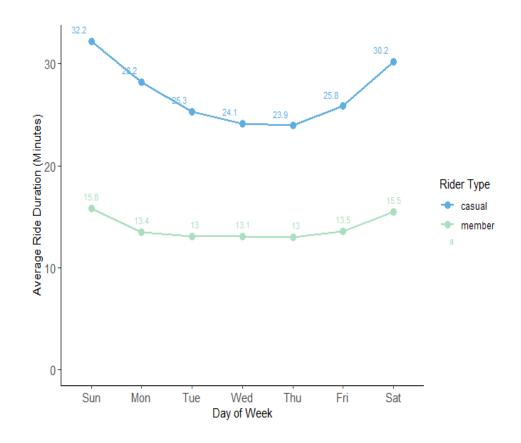
• Introduce premium pricing or ride duration-based pricing to maximize revenue from longer casual rides.

Commuter Benefits:

 Offer ride credits or discounts for frequent short rides to encourage more weekday engagement from members.

Operational Planning:

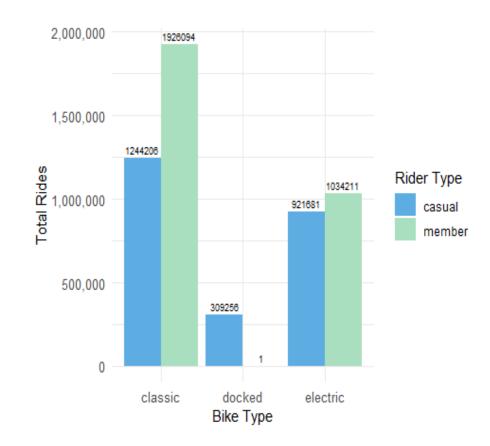
 Ensure bike availability is higher on weekends when casual riders take longer trips.



Total Rides by Bike Type: Key Insights

- Classic bikes are the most used overall, making 58% of all rides across both casual and annual members.
- Electric bikes rank second (35%), showing strong adoption, especially among casual riders (37%).
- Docked bikes are the least used (6%), with annual members almost never using them.

- Optimize Classic Bike Fleet Classic bikes remain dominant, so prioritize maintenance and availability.
- Electric Bike Growth Strategy Since casual riders favor them, introduce electric bike membership plans or pricing bundles.
- Reduce Docked Bike Inventory? With very low usage, especially among annual members, consider relocating or optimizing docked bike stations.



Conclusion: Key Insights & Strategic Direction

- Casual riders generate a significant portion of rides (~45%), but their financial contribution remains unclear without revenue data.
- Annual members provide steady year-round revenue and company loyalty, reducing marketing acquisition costs.
- To optimize our strategy, financial data is needed to determine whether casual riders or members contribute more revenue.

Looking Ahead:

- Request access to financial and demographic data to refine strategies.
- If casuals bring higher revenue, optimize per-ride pricing strategies.
- If members bring more revenue, create stronger conversion incentives.
- Sustainability factor:
- Promoting membership helps create a culture of cycling, reducing pollution and improving public health.

Top Recommendations – Two Strategic Approaches

OPTION A: Request Access to Financial & Demographic Data

 Before implementing major marketing strategies, we need to analyze revenue contribution by rider type.

Key Missing Data for Better Decision-Making:

- 1. Revenue per ride for casual vs. annual members (Who contributes more?)
- 2. Customer demographics (Who are the casual riders? Can they afford membership?)
- 3. Conversion patterns (Do casual riders naturally become members over time?)
- 4. Operating costs per bike type (Are electric/classic/docked bikes equally profitable?)

Why Choose A?

- Ensures data-driven decision-making before spending money on marketing.
- Helps design better pricing models that balance revenue and user experience.

OPTION B: Implement Marketing Strategies Based on Current Findings

• If financial data isn't available, we move forward with targeted marketing strategies.

Key Actions to Convert Casual Riders:

- 1. Summer Membership Promotions Offer limited-time discounts when casual ridership is at its peak.
- 2. Weekend & Electric Bike Packages Since casual riders prefer these, introduce weekend passes or electric bike perks.
- 3. Commuter Loyalty Programs Incentivize annual members with morning ride credits or priority docking.
- Referral Incentives Encourage existing members to bring casual riders through discounts on future rides.

Why Choose B?

- Quickly boosts ridership & engagement without waiting for additional data.
- Uses existing insights to create effective promotions.

Data Ethics & Source Transparency

Data Source:

- Provided by Motivate International Inc. under public <u>license</u>.
- Data used for non-commercial, educational analysis only.

Privacy & Ethics Compliance:

- No personally identifiable information (PII) is included.
- Analysis follows ethical data usage practices.
- Recommendations are based on anonymized aggregate trends.

Thank You

Let's explore insights together!