Cyclistic Case Study

How Cyclistic Can Convert More Casual Riders into Annual Members

Google Data Analytics Capstone - 2025 - Say'Von Williamson

Introduction

Content and Company

- Cyclistic is a Chicago-based bike-share company looking to increase the number of annual members.

- This case study analyzes 12 months of historical ride data to understand the differences between casual riders and annual members.

- The goal is to identify clear behavioral patterns that can support strategies to convert more casual riders into members.

- **Assumption**: Ride data is accurate and reflects typical usage patterns across the city.

Business Task

One	Two	Three

Determine how annual members and casual riders use Cyclistic bikes differently.

Use historical ride data to identify behavioral patterns between both groups.

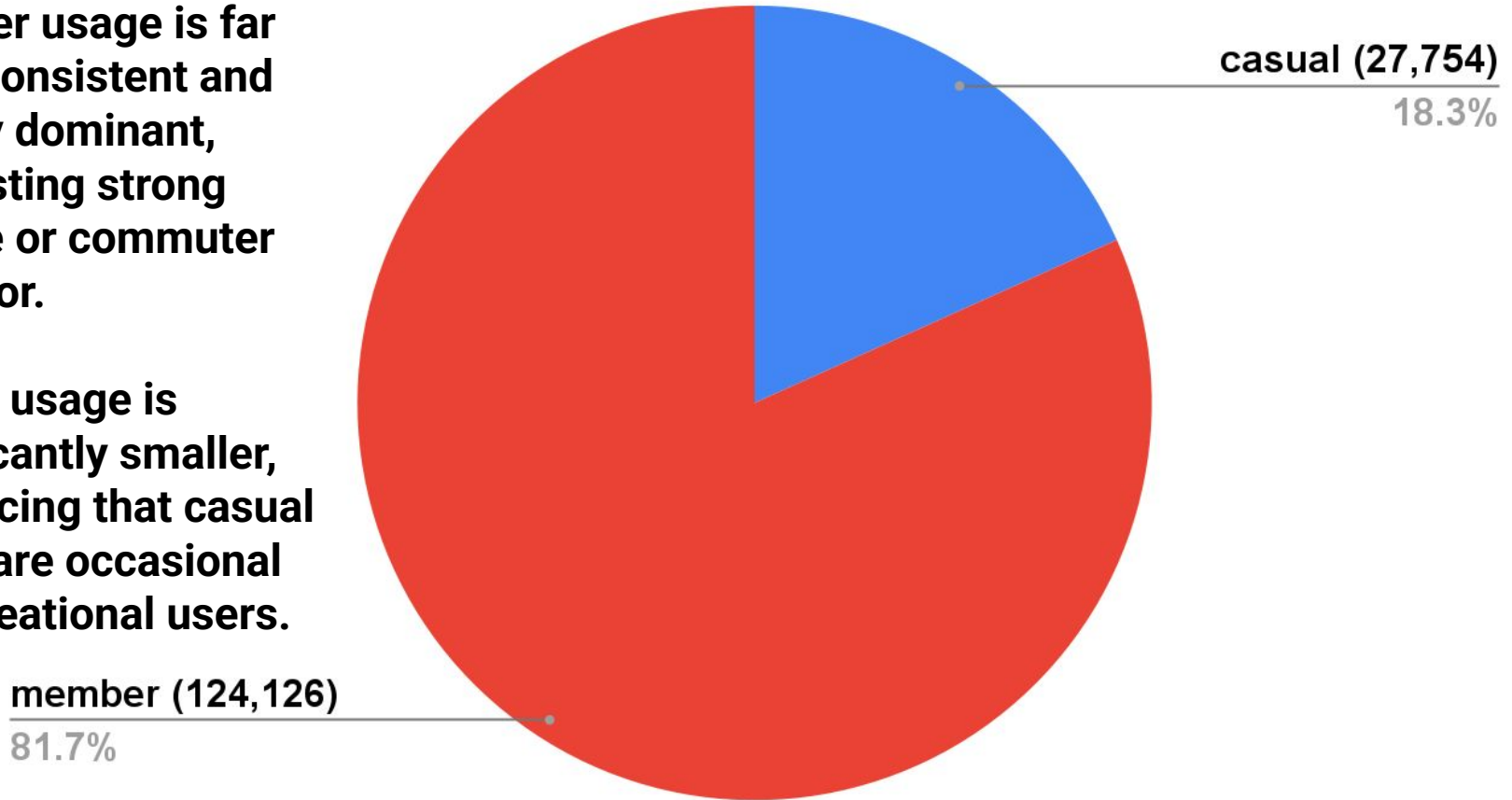**Use insights to develop strategies to increase annual memberships.**

Data Sources

- Cyclistic trip data (12 months) from the official publicly available dataset.

- Includes: ride ID, ride type, start/end time, start/end station, user type.

- Excludes: personally identifiable information (follows privacy requirements).

- Tools used: Google Sheets (pivot tables, visualizations), Google Slides (presentation).

Data Cleaning & Preparation

- Standardized time formats and extracted additional fields (day of week, month).

- Added calculated fields, including ride length.

- Created pivot tables and visualizations to summarize ride patterns.

Total Number of Rides: Members vs Casual

- **Member usage is far more consistent and heavily dominant, suggesting strong routine or commuter behavior.**

- **Casual usage is significantly smaller, reinforcing that casual riders are occasional or recreational users.**
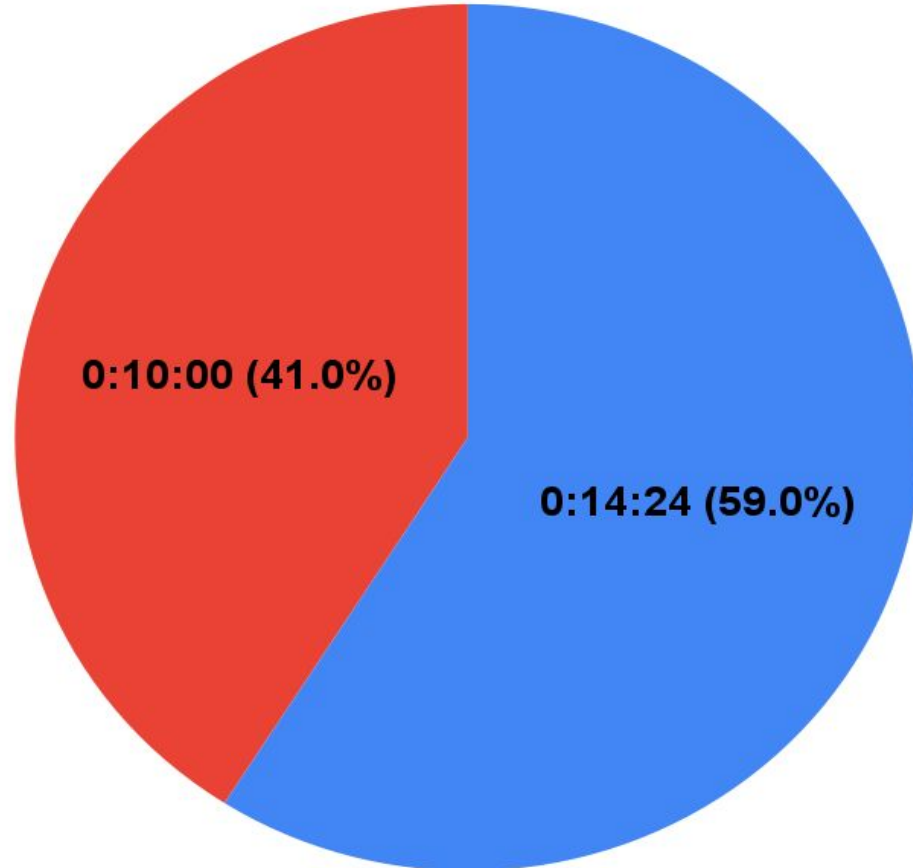
casual (27,754)
18.3%

member (124,126)
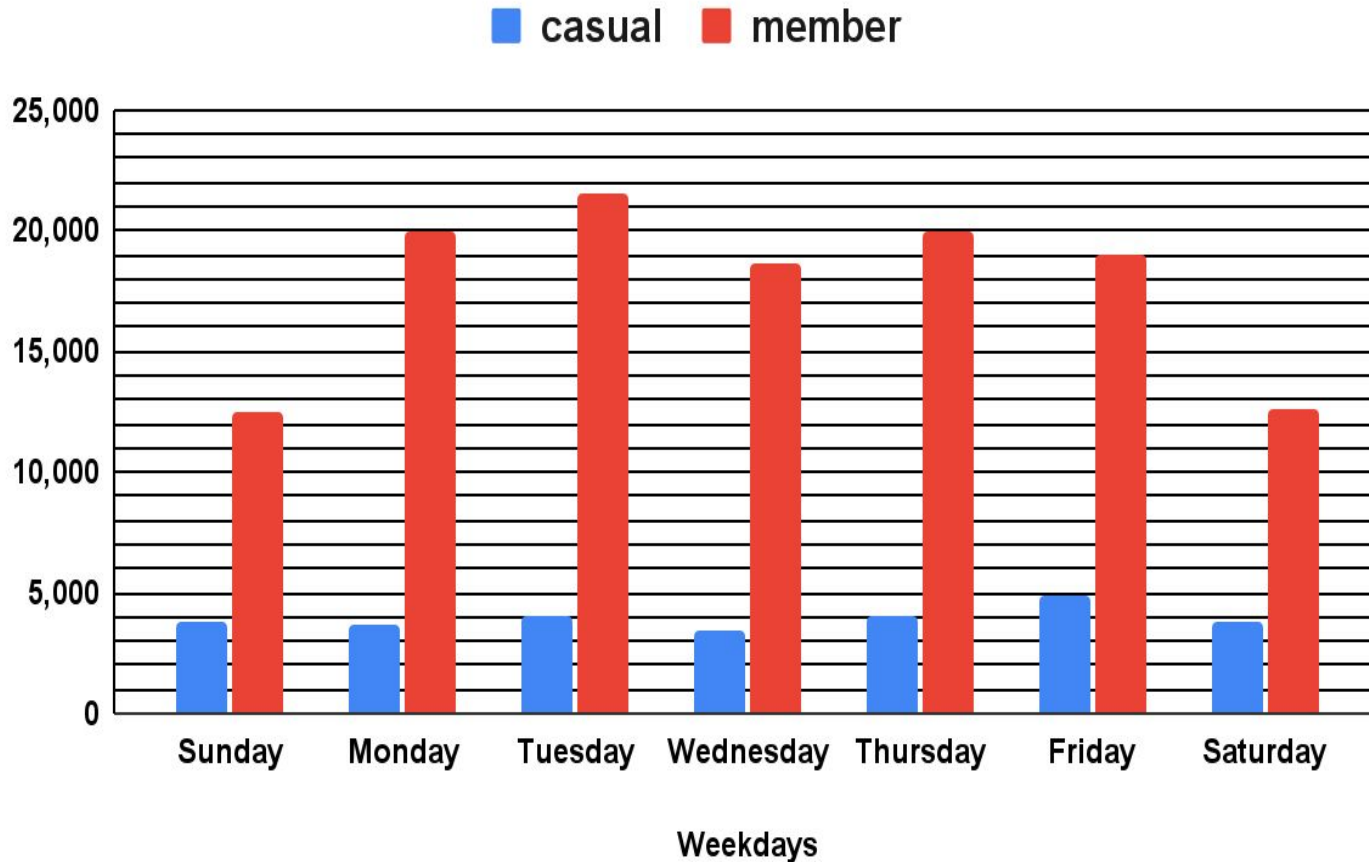81.7%

Average Ride Duration by User Type

- casual
- member

- **Casual riders take noticeably longer trips than annual members.**

- **Members typically use bikes for shorter, routine travel (commuting, errands).**

- **Casual riders' longer durations suggest more recreational or leisure use.**

0:10:00 (41.0%)

0:14:24 (59.0%)

Weekly Usage Patterns: Members vs Casual Riders

- **Casual riders heavily favor weekends, indicating recreational usage.**

- **Members ride more often during weekdays, aligning with commuting or regular daily routines.**

- **These usage patterns highlight two distinct rider behaviors, which can be leveraged for targeted marketing.**

Summary of Analysis

- **Members consistently take more total rides than casual riders.**

- **Casual riders have longer average ride durations, while members take shorter, frequent trips.**

- **Weekend usage is dominated by casual riders, reflecting recreational riding patterns.**

- **Members show strong weekday usage, aligning with commuting or routine transportation.**

Key Findings

- **Casual riders behave like leisure-oriented users who ride longer and mostly on weekends.**

- **Members appear to be utilitarian riders using bikes for short, routine trips throughout the week.**

- **Clear behavioral differences suggest two distinct customer segments with different motivations.**

- **These patterns provide direct opportunities to convert casual riders into members through targeted strategies.**

Recommendations

1. **Weekend Membership Promotions**
   Target casual riders with discounted weekend or short-term membership trials to increase conversions.

2. **Leisure-Based Membership Incentives**
   Create membership perks for scenic routes, long-ride rewards, or recreational users to appeal to casual riders who take longer trips.

3. **App-Based Personalized Marketing**
   Use ride history data to send personalized membership offers to casual riders who show frequent or seasonal usage patterns.