

Case Study 1

Case Study: How Does a Bike-Share Navigate Speedy Success?

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1. How do annual members and casual riders use Cyclistic bikes differently?

The code results show that annual members and casual riders use Cyclistic bikes differently in a number of ways.

- Average ride length: Annual members have an average ride length of 13.03 minutes, while casual riders have an average ride length of 24.52 minutes. This suggests that annual members are more likely to use the bikes for short trips, such as commuting to work or running errands, while casual riders are more likely to use the bikes for longer trips, such as leisure rides.
- Bike type: Annual members are more likely to use classic bikes, while casual riders are more likely to use docked bikes. This may be because classic bikes are more comfortable and easier to ride, while docked bikes are more durable and can be left locked up for longer periods of time.
- Time of day: Annual members are more likely to use the bikes during the morning and evening rush hours, while casual riders are more likely to use the bikes during the day and on weekends. This suggests that annual members are more likely to use the bikes for commuting, while casual riders are more likely to use the bikes for leisure activities.
- Season: Annual members are more likely to use the bikes during the summer months, while casual riders are more likely to use the bikes during the spring and fall months. This may be because the weather is more pleasant during these months, making it more enjoyable to ride a bike.

2. Why would casual riders buy Cyclistic annual memberships?

There are a few reasons why casual riders might buy Cyclistic annual memberships.

- To save money: Annual memberships are much cheaper than buying single-ride or full-day passes.

- To have unlimited access: Annual members have unlimited access to Cyclistic bikes, which can be convenient for people who use the bikes frequently.
- To get discounts: Annual members get discounts on bike accessories and repairs.
- To support Cyclistic: Annual members help to support Cyclistic, which provides a valuable service to the community.
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3. How can Cyclistic use digital media to influence casual riders to become members?

- Targeted advertising: Cyclistic can use digital advertising to target casual riders who are most likely to be interested in becoming members. This could be done by targeting people who live in areas where Cyclistic bikes are popular, or people who have shown an interest in cycling in the past.
- Social media: Cyclistic can use social media to create content that highlights the benefits of being an annual member. This could include videos of people using Cyclistic bikes to commute or run errands, or blog posts about the environmental benefits of biking.
- Cyclistic can use digital media in a number of ways to influence casual riders to become members.
- Email marketing: Cyclistic can use email marketing to stay in touch with casual riders and remind them about the benefits of becoming members. This could include sending out regular newsletters with news about Cyclistic, or special offers for annual members.

By understanding how annual members and casual riders use Cyclistic bikes differently, and why casual riders might buy annual memberships, Cyclistic can develop a marketing strategy that is more likely to be successful. By using digital media effectively, Cyclistic can reach a wider audience of potential members and encourage them to make the switch to an annual membership.

1. Identify the Business Task: The business task is to understand how annual members and casual riders use Cyclistic bikes differently. This analysis aims to provide insights that can guide marketing strategies to convert casual riders into annual members, ultimately driving business growth for Cyclists.

2. Consider Key Stakeholders: The key stakeholders in this analysis include:

- Moreno: The Director of Marketing at Cyclistic, initiated the analysis to improve the conversion rate of casual riders to annual members.
- Marketing Analysts Team: Responsible for conducting the data analysis and providing actionable insights for the marketing strategies.

Case Study Roadmap - Prepare

3. Description of Data Sources Used: The primary data source used for this analysis is the historical bike trip data provided by Cyclistic. This dataset includes information about bike rides, such as ride duration, start and end stations, rideable types, user types (member or casual), day of the week, month, hour, and season.

4. Documentation of Data Cleaning and Manipulation: The following data cleaning and manipulation steps were performed:

- Ordered categorical variables 'days_of_week' and 'month' for proper visualization.
- Removed columns not involved in the analysis, omitted rows with NA values, and removed duplicate rows.
- Filtered out ride lengths less than or equal to zero.
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Case Study Roadmap - Process

5. Summary of Analysis: The analysis revealed several differences between annual members and casual riders in terms of bike usage:

- Annual members have a higher average daily ride count than casual riders.
- Casual riders tend to have longer average ride durations compared to annual members.
- Different bike types are preferred by these two user groups.
- Annual members have a more evenly distributed ride pattern throughout the day.
- Seasonal usage patterns vary between the two groups.

6. Supporting Visualizations and Key Findings: Key findings include:

- Annual members use bikes more frequently than casual riders.
- Casual riders take longer rides on average.
- Docked bikes and electric bikes are preferred by annual members.
- Casual riders show peak usage during afternoons and evenings.

Supporting visualizations, such as bar plots, line charts, and pie charts, were provided in the previous analysis to illustrate these differences.

Case Study Roadmap - Analyze

7. My Top Three Recommendations: Based on the analysis, here are my top three recommendations for Cyclistic's marketing strategies:

Promote Short and Frequent Rides: Since annual members tend to take shorter and more frequent rides, Cyclistic can emphasize the convenience of using bikes for quick errands or short trips through targeted advertisements and social media posts.

Highlight Cost Savings: Showcase how annual memberships offer better value for regular riders by calculating potential cost savings compared to paying for individual rides. This information can be shared through emails, interactive tools on the app, and social media.

Tailored Bike Type Promotion: Focus on promoting docked bikes and electric bikes, which are preferred by annual members. Offer incentives or discounts for using these bike types, encouraging casual riders to try them out and potentially convert to memberships.

Case Study Roadmap - Act

8. Action Plan:

- Implement targeted advertising campaigns with messaging that aligns with the recommended strategies.
- Develop interactive tools on the Cyclistic app to allow users to estimate their potential cost savings and benefits as annual members.
- Monitor the conversion rates of casual riders to annual members after implementing the strategies.

9. Reflection: The analysis successfully identified differences between annual members and casual riders' bike usage patterns. The recommendations are designed to leverage these differences and encourage casual riders to become profitable annual members. Regular monitoring and adjustment of marketing strategies based on performance will be crucial for achieving the desired business growth.

Completing this case study within a week is a feasible goal, and it provides a solid foundation for Cyclistic to refine their marketing approach and drive user conversion.