# Data Analysis of usage patterns of casual and annual members

## Data Analyst: Sagar Manjunath

## Client/Sponsor: Cyclistic

Scenario:

In 2016, Cyclistic launched a successful bike-share offering. Since then, the program has grown to a fleet of 5,824 bicycles that are geotracked and locked into a network of 692 stations across Chicago. The bikes can be unlocked from one station and returned to any other station in the system anytime.

Until now, Cyclistic’s marketing strategy relied on building general awareness and appealing to broad consumer segments. One approach that helped make these things possible was the flexibility of its pricing plans: single-ride passes, full-day passes, and annual memberships. Customers who purchase single-ride or full-day passes are referred to as casual riders. Customers who purchase annual memberships are Cyclistic members.

Cyclistic’s finance analysts have concluded that annual members are much more profitable than casual riders. Although the pricing flexibility helps Cyclistic attract more customers, Director of marketing believes that maximizing the number of annual members will be key to future growth.

## Business objective:

*To convert the existing casual riders into annual members by understanding how casual riders differ from annual members and how digital media could play a role in affecting the marketing strategies.*

## Scope / Major Project Activities:

|  |  |
| --- | --- |
| Activity | Description |
| Highlighting the key differences between casual riders and annual members. | This step assists in understanding the needs of members from both the memberships and pointing out the factors that lead to annual membership. |
| Understanding the influence of different digital marketing strategies. | Through this, the best strategies of digital marketing can be adopted to aid the conversion process from casual to annual members. |
| Utilizing the historical bike trip data from past 12 months to identify trends and patterns | With the help of data analysis of historical data and visualization of trends in previous bike trips, a hypothesis will be formed and iteratively tested out till the optimal results are achieved. |

## This project does not include:

*The tasks that are out of this scope of projects are as follows:*

* Increasing the number of memberships for cyclistic company.

Stakeholder Matrix:

|  |  |
| --- | --- |
| Low Interest, High Power | High Interest, High Power |
| * Cyclistic Finance team | * Lily Moreno – Director of marketing * Cyclistic executive team |
| Low Interest, Low Power | High Interest, Low Power |
| * Casual memberws | * Cyclistic marketing analytics team |

## Data Sources:

The data was obtained from the company’s trusted source: <https://divvy-tripdata.s3.amazonaws.com/index.html>

The analysis is based on historical bike trip data from past 3 months. The different factors for analysis include:

* **Trip duration:** Start and end times of rides
* **User type:** Casual or annual member
* **Bike type:** Electric or classic
* **Rider frequency:** Number of rides per user
* **Busiest days of the week:** Average number of rides on each day of week

## Deliverables:

*A specific list of things that the project will deliver.*

|  |  |
| --- | --- |
| Deliverable | Description/ Details |
| How the riding patterns of casual riders differ from that of annual riders | By understanding the riding pattern of both membership types, it makes it possible to understand the needs of the riders based on which marketing strategies can be planned to aid the conversion process |
| Suggesting effective digital media platforms to promote annual membership. | Once the needs of the customers are discovered, it is time to reach out to them through best marketing strategies |

## Schedule Overview / Major Milestones:

|  |  |  |
| --- | --- | --- |
| Milestone | Expected Completion Date | Description/Details |
| *Cleaning and processing of data* | *-* | *-* |
| *Discovering trends and pattern through visualization.* | *-* | *-* |
| *Interpreting the results and presenting it to the stakeholders* | *-* | *-* |