COURSERA CASE STUDY

Capstone project for the Google Data Analytics Professional Certificate

CYCLISTIC: TURNING POTENTIAL INTO LOYALTY

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Introduction and Project objectives

Introduction and Project objectives

1. The Business

- **Company overview:** Cyclistic is a successful bike-share program with **5,800+** bikes and **600+** docking stations within Chicago
- **Customer segments:** Casual Riders and Annual Members

2. Objectives

- **Opportunity:** Annual members are much more **profitable** than casual riders
- **Business tasks:**
  - Converting casual riders into annual members
  - Increase ….of total number of riders

This case study is part of the Google Data Analytics Professional Certificate. The analysis is based on public data to solve a business challenge for Cyclistic

02.

Executive Summary

A high-level overview of key insights, data findings, and strategic recommendations

Executive Summary

Objectives

- **Analyze** historical trip data to uncover **distinct patterns** between members and casual riders
- **Attract 10%** more casual riders on top of the 2025 base (1.94 M)
- **Create** data-backed **marketing strategies** to ensure **20%** new customers enroll in the membership initially

Key insights

- Casual riders are **weekend-usage centric**, while annual members are **stable users**
- Both casual riders and annual members prefer using **electric bikes**
- Casual riders distribute near **recreational areas,** while members are **everywhere**

Proposals

- Develop an **annual weekend membership**
- Create a **reward system** for using electric bikes
- Carry out a **3-day** membership **free trial** for new customers

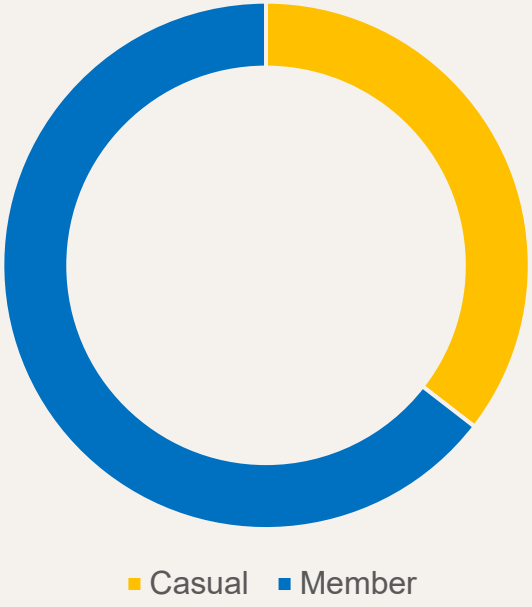
03.

Overview Segments

Overview segments

Commuters

- The Daily Commuters use an annual membership for work and stable mobility
- Account for 65% of the total rides



Casual riders

- The Weekend Explorer uses single tickets for entertainment and flexible mobility
- Account for 35% of the total rides

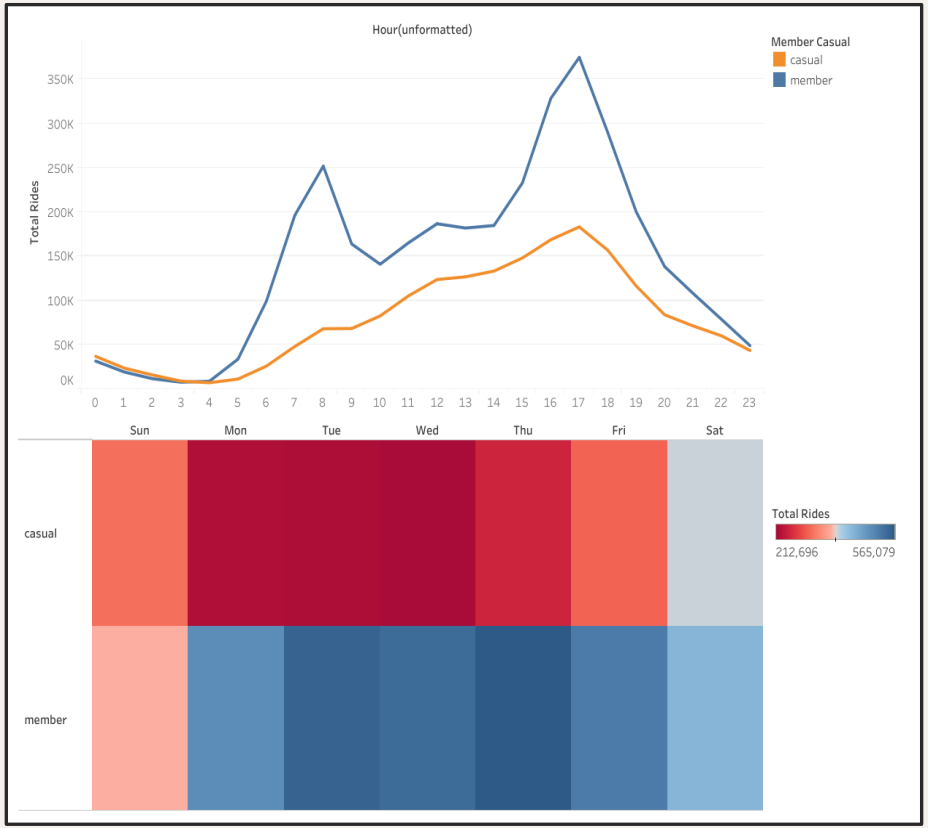
04.
Behavioral Deep-Dive

Determine and estimate how temporal factors, usage intensity, and geographic patterns shift the customer's biking behaviors

Temporal Aspects

The Rhythm of Life

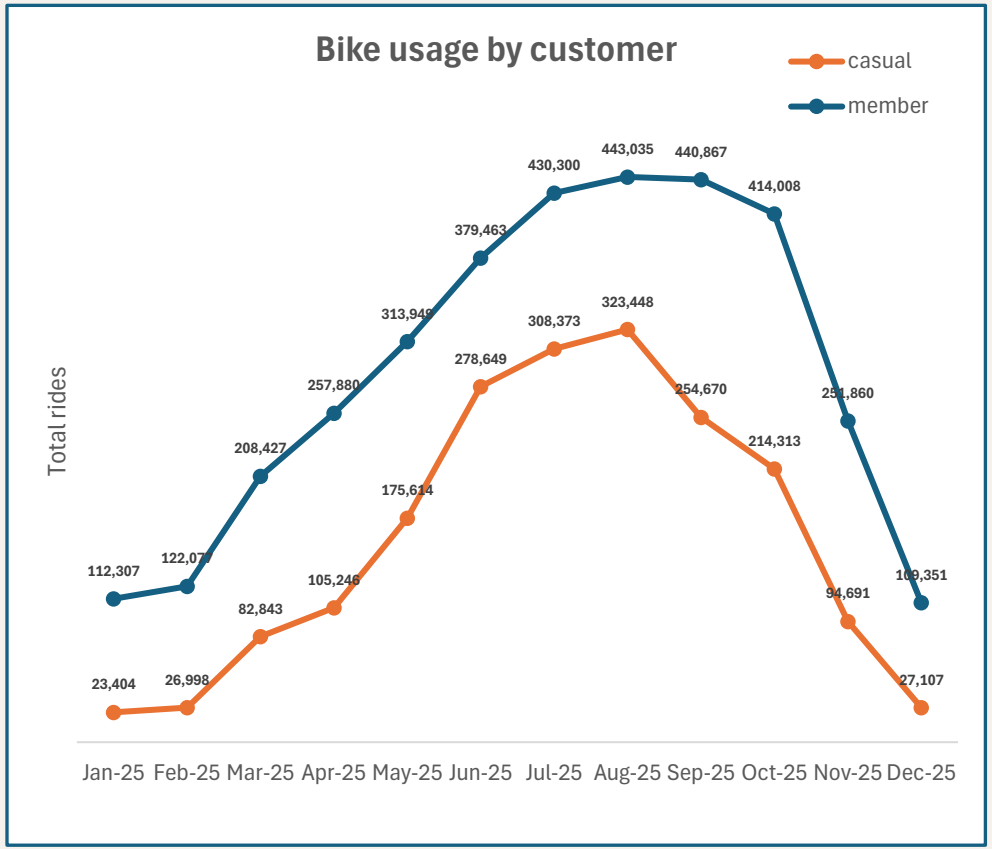
- **Weekend Surge:** Casual riders: leisure-oriented-> Annual Members: routine-oriented
- **Notable value:** Members peak at 8 AM and 5 PM, while casual riders concentrate between 8 AM and 5 PM
- **Insight:** Usage patterns reflect rider intention and lifestyle differences



Temporal Aspects

Seasonal Patterns

- **Summer Peak:** Both casual riders and members are at their highest between Jun and July
- **Seasonal consistency**: Casual riders fluctuate unpredictably, while members follow a stable trend year-round
- **Insight:** Casual riders are seasonally sensitive, creating opportunities for summer promotions



Usage Intensity

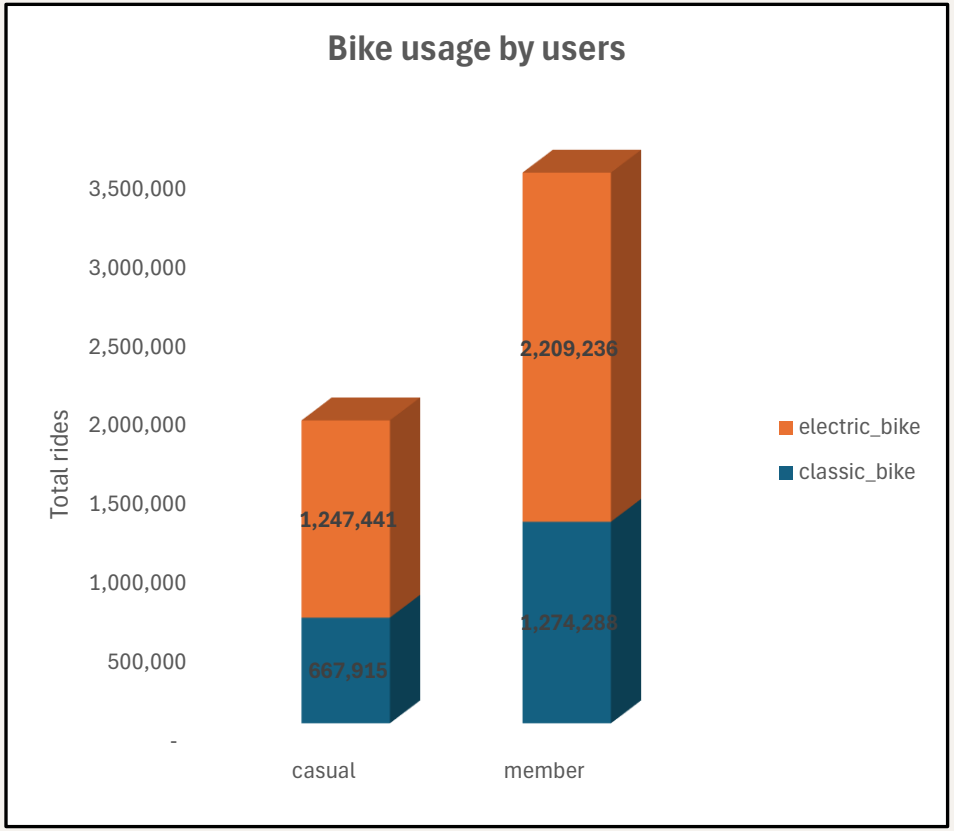
Metrics

- **Volume:** Strong correlation between total rides and distribution of Members/Casuals
- **Engagement**: Distinct usage intent affects the notable average length for biking
- **Insight:** Casual riders show 0.9 times less total usage, but 1.6 times higher average value

Usage Intensity

Bike preferences

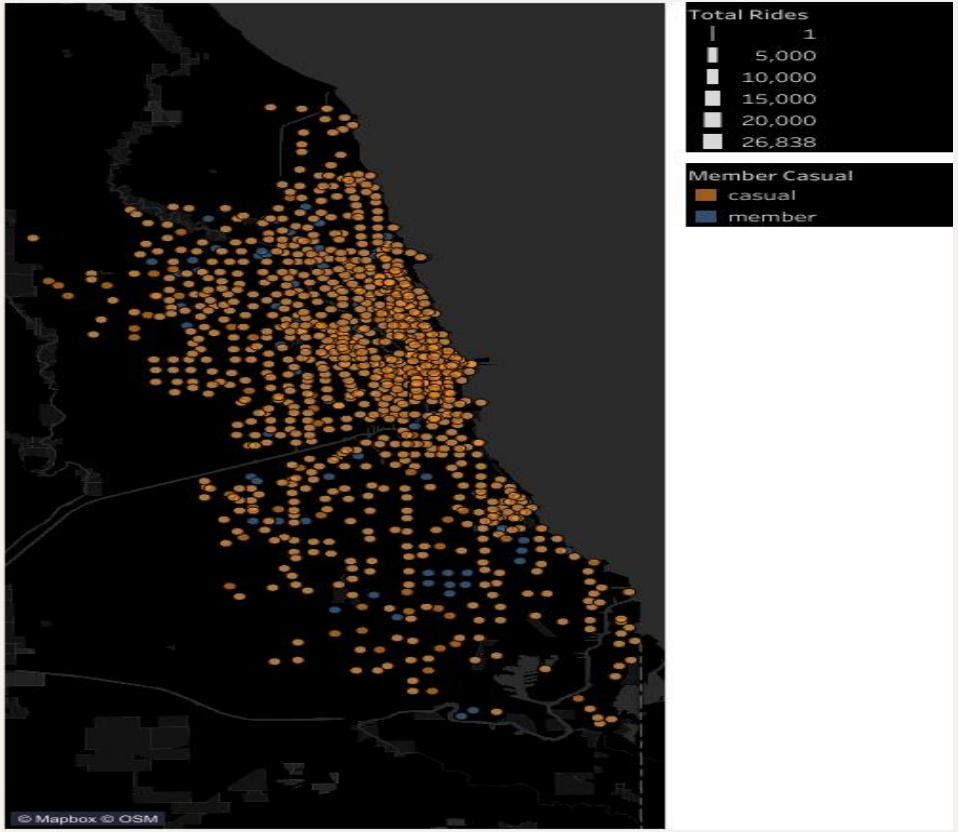
- **Tech-explorers:** Both casual riders and members prefer electric bikes to classic bikes
- **High-Diff**: There is an equal number of casuals' electric bikes and members' classic bikes
- **Insight:** Casuals and members account for 65% and 63% respectively, reflecting the same preference



Geographic patterns

Locations

- **Distribution:** While members distribute widely, casuals are highly clustered at recreational areas
- **Relationship**: Strong correlation between geography and usage patterns
- **Insight:** Members show a balanced distribution, while casuals populate near waterfronts



05.

Summary and Conclusions

Summary and Conclusions

1

Casual riders are seasonally sensitive, and peak on the weekends with a leisure-flexible schedule

2

Casual riders prefer electric bikes for leisure trips, showing strong engagement but lower total and higher average durations

3

Waterfronts and leisure hubs hold the majority of casuals, reinforcing the connection between ridership and recreational activities

4

Evidence suggests that temporal factors, usage intensity, and geographical patterns reveal a roadmap for digital marketing strategies

06.

Business Suggestions

Business Suggestions

1

Annual Weekend Membership: casuals are weekend-oriented => promoting “Personalized memberships” with **targeted social media ads** to create predictable revenue and increase customer retention, while meeting the riders’ demands

2

Reward system: Casuals lean toward electric bikes, implementing an **in-app gamified reward system** and creating green milestones to drive user retention and encourage membership conversion

3

3-day free trial: Operating a limited-time trial with **Geofencing marketing plans** at Waterfront stations for casuals to experience member-only perks without initial commitment, effectively convert spontaneous users into annual members

Thank You

I really appreciate your time!