Cyclistic Bike Share case study

Cyclistic bike share :Case Study Overview

Business Objective:

The project aims to create a marketing strategy to convert casual riders into members. This analysis can help identify which casual riders to target with the marketing campaign, by identifying key informations about the riders with an annual membership(Members) and the key differences with casual riders (Pay per ride).

To answer the business objective, this analysis will answer the following questions based on two years historical data of rides (2021 - 2022):

- What is the average duration of members' bike trips ?

- What are the members' top five routes ?

- What are the two most frequent times of the day for bike trips for members ?

- Do members ride during weekends or only on business days ?

- Are there areas where members are concentrated ? If yes, what are the top two Areas ?..

By: Marouane Tayachi
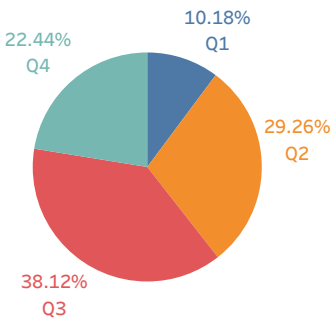Last Updated : 11/08/2024

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Members Overview

Average Trip Duration

12 Min

Frequent Usage By Quarter

- 10.18% Q1
- 29.26% Q2
- 38.12% Q3
- 22.44% Q4

Frequent Period Of The Week
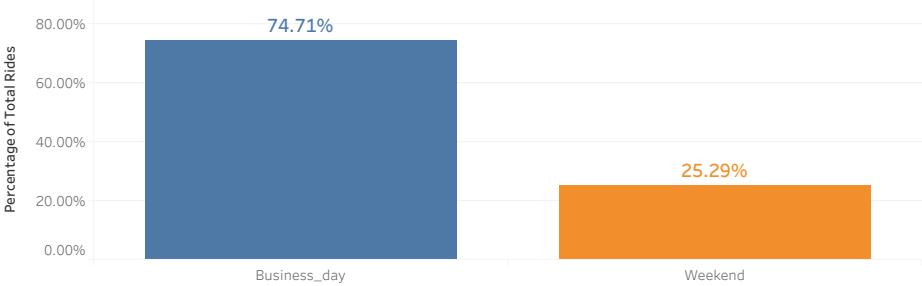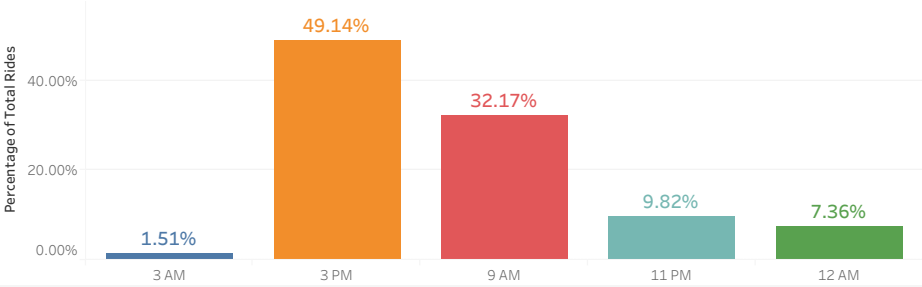
74.71% Business_day
25.29% Weekend

Percentage of Total Rides

Frequent times of the day

- 1.51% 3 AM
- 49.14% 3 PM
- 32.17% 9 AM
- 9.82% 11 PM
- 7.36% 12 AM

Percentage of Total Rides

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Members most frequent Areas
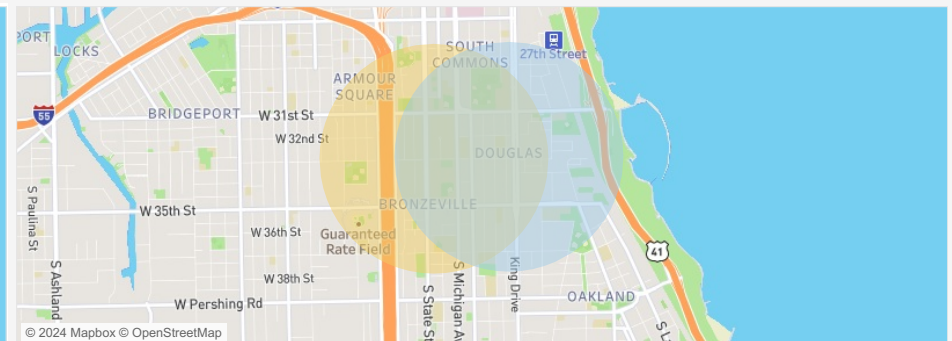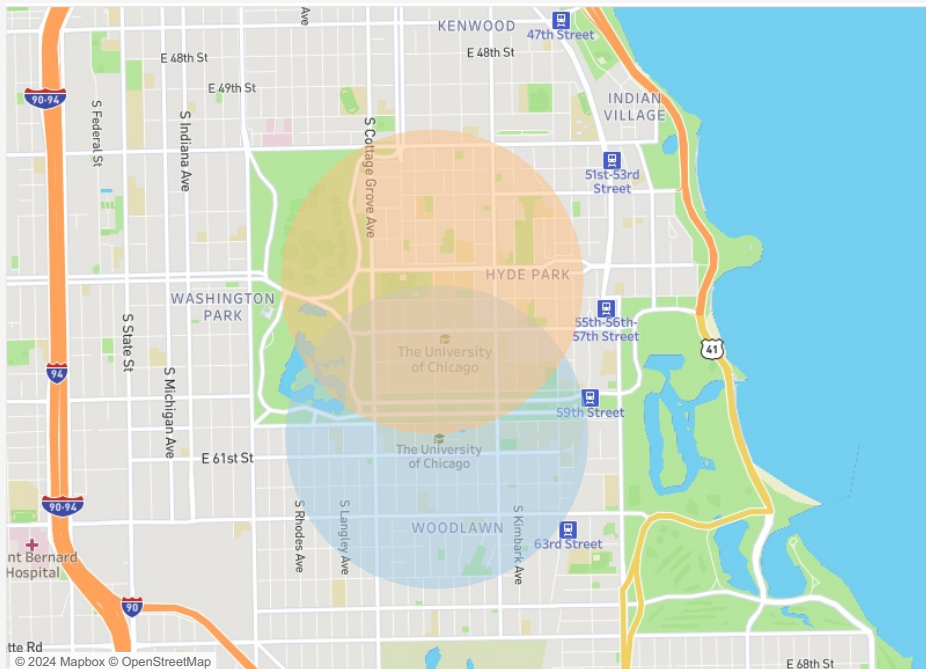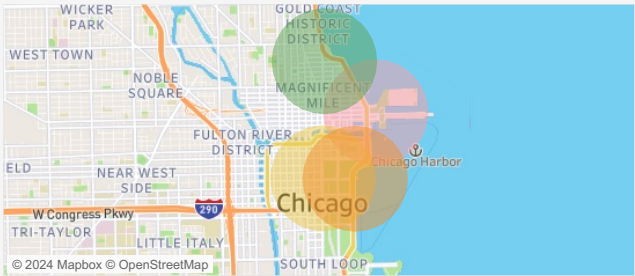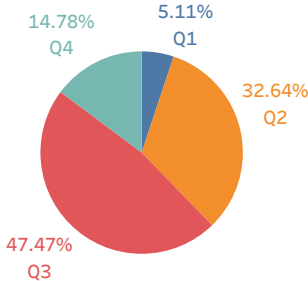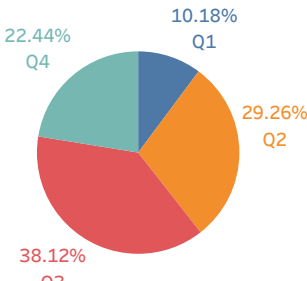

There is a concentration in the following areas for members :
=> Ellis Ave & 60th St
=> Ellis Ave & 55th St
=> University Ave & 57th St
=> Calumet Ave & 33rd St
=> State St & 33rd St
As we can see, the centers of those areas are The University of Chicago and Illinois Institute of Technology.

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Comparaison Casuals/members

Casuals	Members
Average Trip Duration	Average Trip Duration
26 Min	**12 Min**
Frequent Usage By Quarter	Frequent Usage By Quarter

Casuals — Frequent Usage By Quarter
- 5.11% Q1
- 32.64% Q2
- 47.47% Q3
- 14.78% Q4

Members — Frequent Usage By Quarter
- 10.18% Q1
- 29.26% Q2
- 38.12% Q3
- 22.44% Q4

- The key differences, in terms of number of rides, with the casuals are the trip durations and the routes. Casual riders seem to use the service more to visit other areas for entertainment such as "DuSable Lake Shore Dr" near the sea.

- Members are probably students or teaching staff that use the bikes on a daily basis to commute short distances, as they use the service more on business days during rush hours in areas with heavy campus concentration, and the number of trips drops at the end/beginning of year when a lot of them go back home for holidays.

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Key Takeaways:

- Member trips tends to be short (Average 12 min)

- Top two most frequent trip times of the day are 3PM and 9AM

- Around 75% of the trips are in Business day

- There is a concentration in Campus areas for members

- Number of trips in the last and first quarter of the year, when holidays take place, drops compared to other quarters.

Recommendations :

- A further analysis should be conducted to confirm riders with annual memberships profile through a survey.

- The marketing Campaign should target the casual riders that fit the profile.

- The marketing Campaign should take place in the second and thirs quarter of the year where the service usage is at its peak.