Differentiation patterns between occasional cyclists and annual members

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About Cyclistic

- Cyclistic is a bike-share company in the city of Chicago. The program has a fleet of 5,824 bicycles that are geolocated and locked into a network of 692 stations across the city. Bikes can be unlocked at one station and returned to any other station in the system at any time.

- Until now, Cyclistic's marketing strategy has focused on building general awareness and attracting broad consumer segments. One approach that made this 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.**

- Financial analysts have concluded that annual members are significantly more profitable than casual riders. While pricing flexibility helps Cyclistic attract more customers, the director of marketing believes that **maximizing the number of annual members** will be key to future growth.

Objectives

- Cyclistic's marketing department wants to **design marketing strategies aimed at converting casual riders into annual members**.

Objective of the analysis

- To analyze bike trip data to **identify patterns that differentiate casual riders from annual members.**

- **Generate insights** for marketing campaigns that increase conversions.

About the data

- The data used comes from the Divvy Bikes program, extracted from the official open data portal of the City of Chicago. Two files corresponding to the first quarter of the years 2019 and 2020 were downloaded, including all trips recorded by shared bicycle users, detailing date, time, stations, and user type.
- The data is publicly accessible under an open use license. It does not contain personally identifiable information, complying with privacy policies.

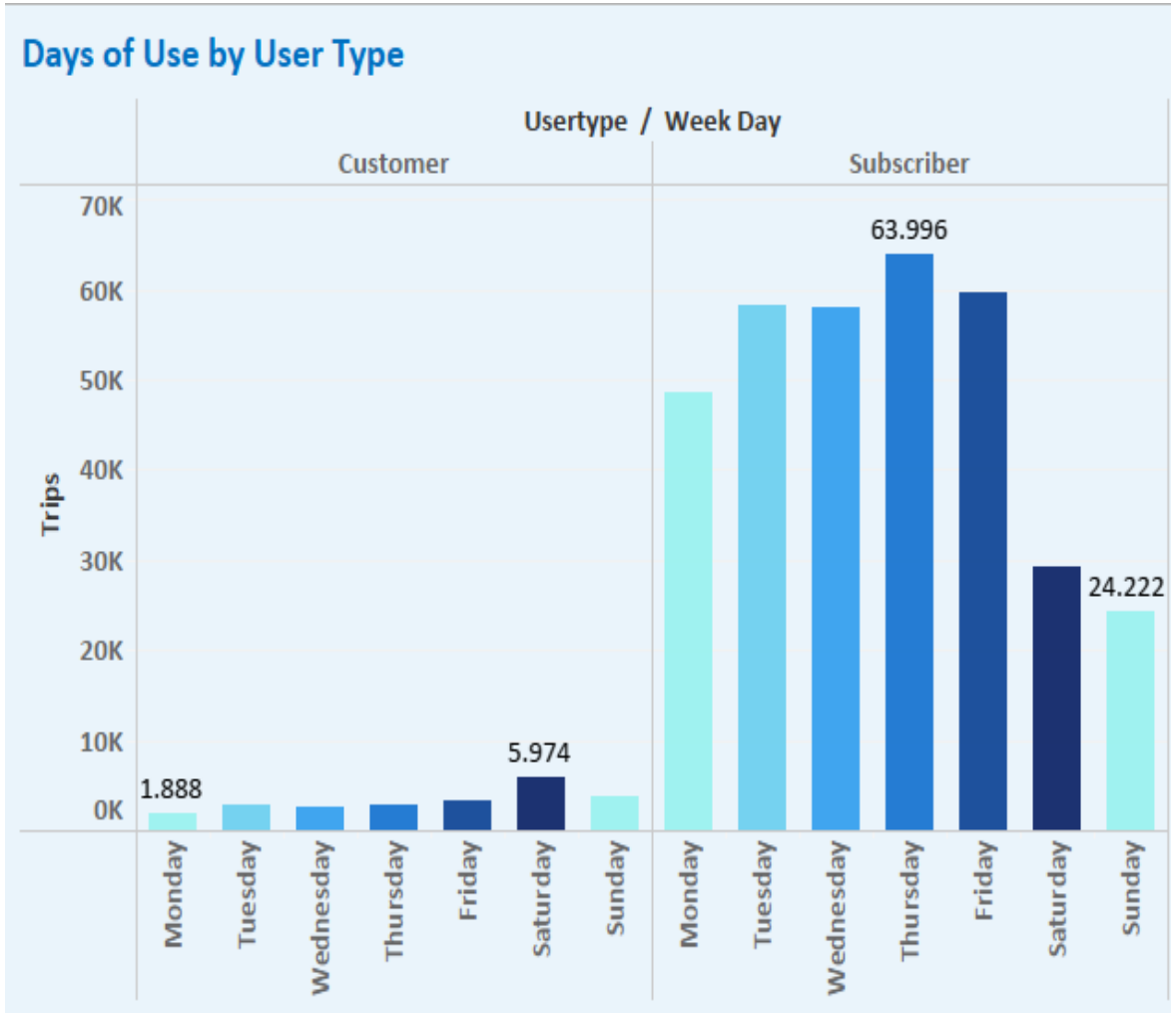
Tools

- Processing: Rstudio
- Visualization: Tableau
- Presentation: PowerPoint

Cleaning and Preparing the Data

- Homogenizing Columns and Data Types.
- Unifying Datasets.
- Calculating Trip Duration, Day of the Week, and Time of Day.
- Filtering Invalid or Incomplete Data Points.

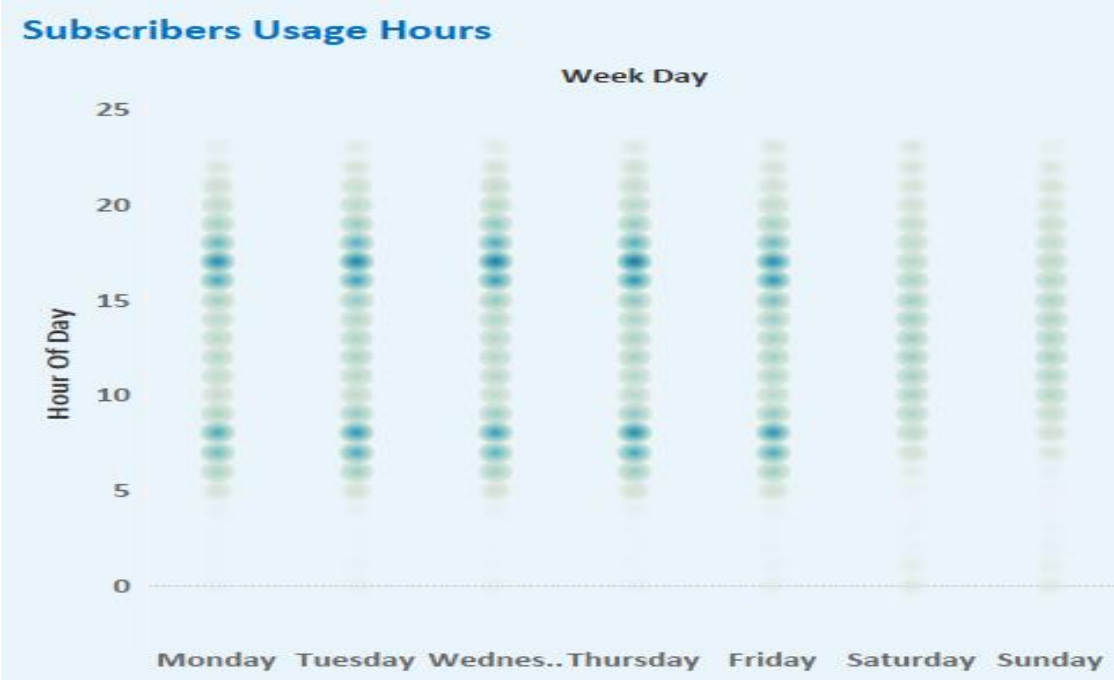
Days of Use by User Type

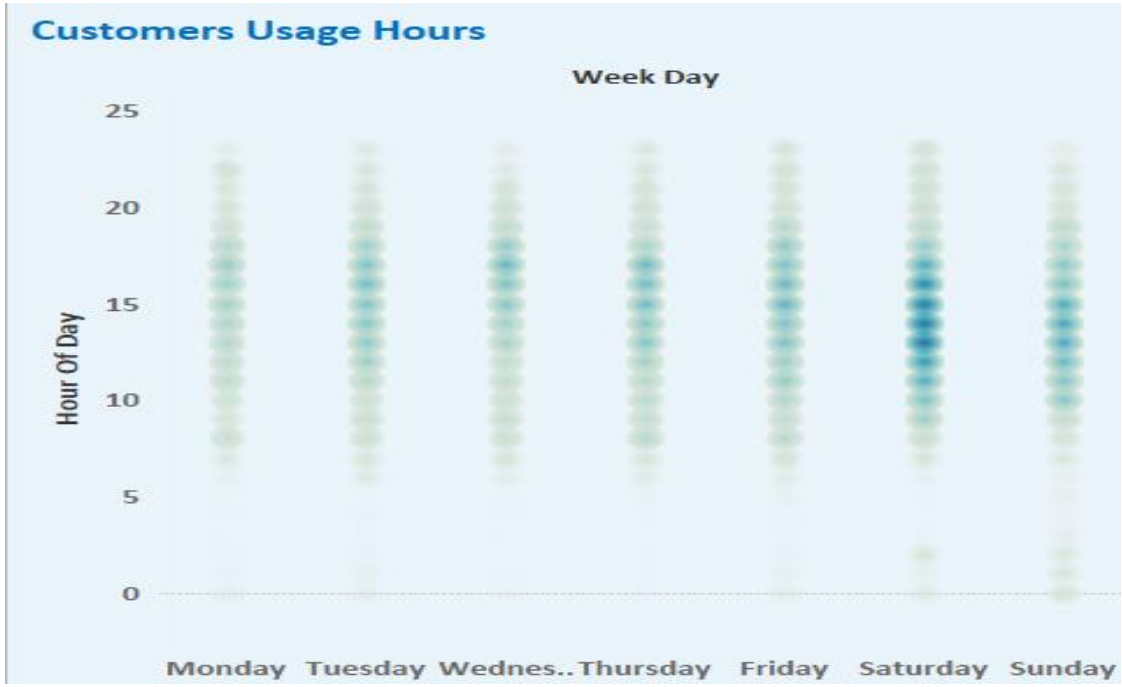


- The days when **casual riders** take the most trips are **Saturdays and Sundays**, and the day with the fewest trips is Monday.

- **Subscribers** maintain a **high number of trips throughout the week**, with Thursday being the day with the most recorded trips, and a significant decrease on weekends, with Sunday being the day with the fewest trips.

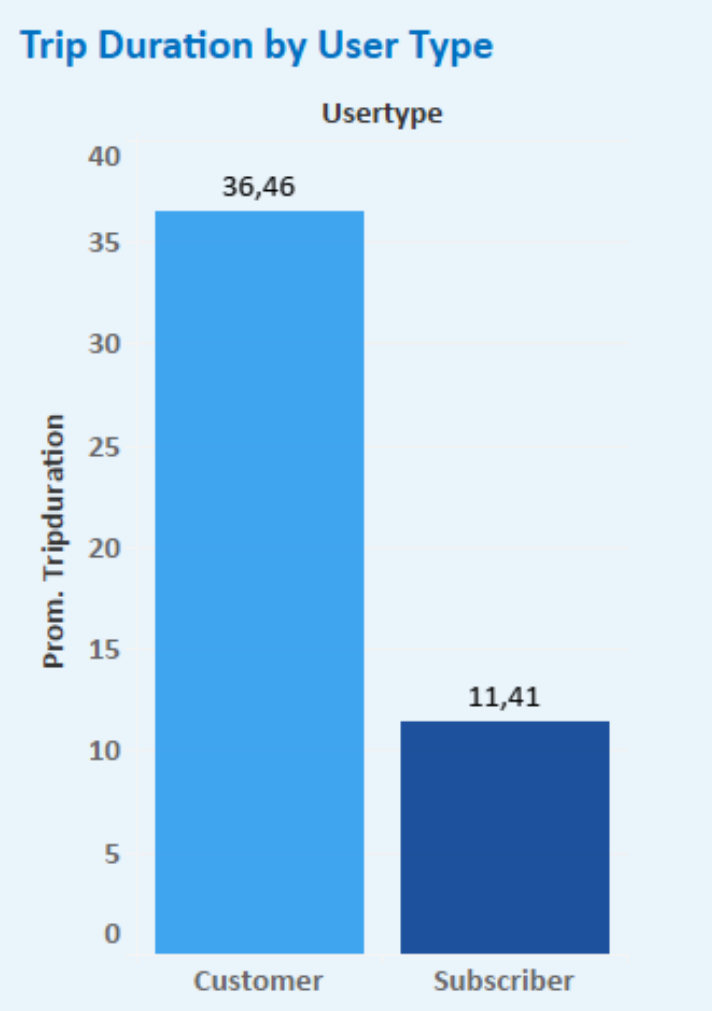
Usage Hours by User Type





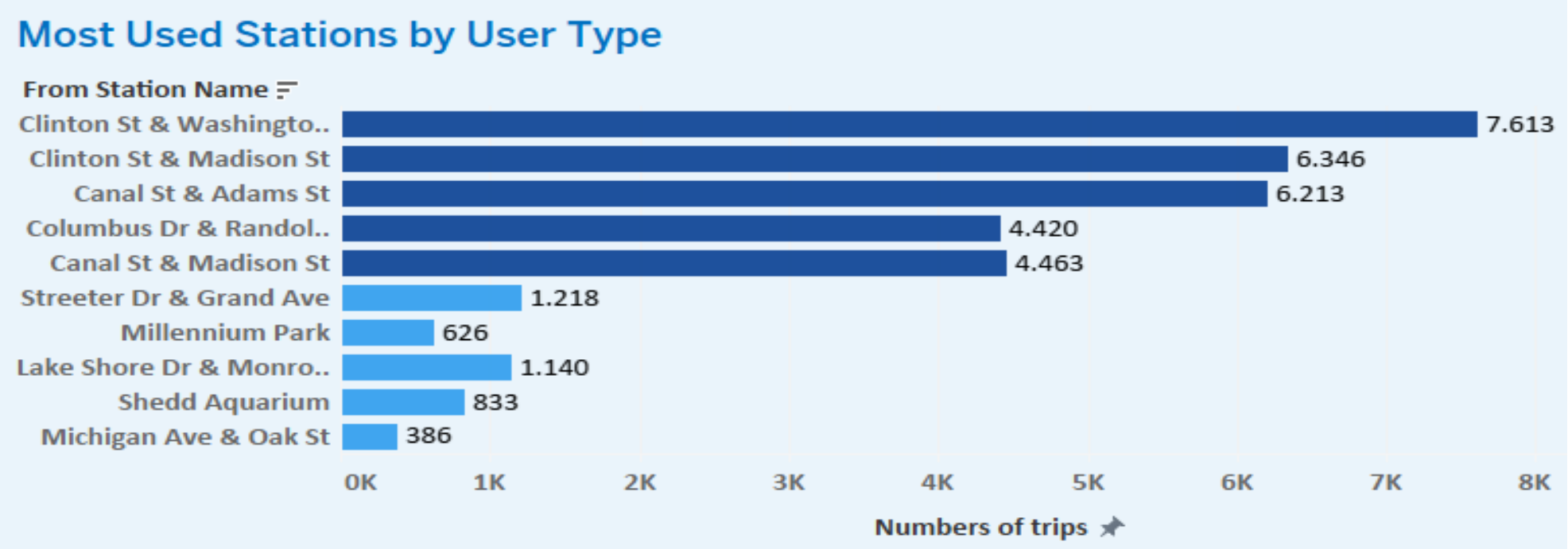
- **Customers** use the bike on **weekends** between **11:00 AM and 5:00 PM**.
- **Subscriber** use it from **Monday to Friday** between **7:00–9:00 AM** and **4:00–6:00 PM**.

Trip Duration by User Type



- The average duration of trips taken by **subscribers** is **11.4** minutes, while that of **casual** riders is **36.4** minutes.

Most Used Stations by User Type



- The stations most used by **casual** riders are in **tourist areas**, whereas those most used by **subscribers** are located near **business districts**.

Key Insights from the Analysis

Clear Differences in Usage Patterns Between User Types:
Casual riders primarily use the bicycles on weekends, with usage peaks between 11:00 AM and 4:00 PM, indicating mostly recreational and tourist use.
In contrast, subscribers show a concentration of trips on weekdays, especially during the 7:00 to 9:00 AM and 4:00 to 6:00 PM time slots, suggesting frequent use as a mode of transport for daily commutes to work.

Location of Use by User Type:
Casual riders typically start their trips from stations located in tourist areas, such as the lakefront, parks, and popular areas.
Subscribers prefer stations near financial districts and office areas, reinforcing the pattern of functional use.

Differences in Trip Duration:
The average trip duration for casual riders is 36.5 minutes, while for subscribers it is 11.4 minutes, reflecting a more specific and efficient use by the latter group.

Strategic Recommendations

Location and Time-Segmented Marketing Campaigns:

•Implement specific promotions for casual riders during weekends, targeting tourist stations with higher traffic.

•Use personalized messages in the app or via email marketing to suggest the annual pass as a way to save money, highlighting the long-term value compared to multiple recreational trips.

Conversion Offers at Key Trip Points:

•Place physical posters or promotional QR codes at stations with a higher volume of casual riders.

•Offer an immediate discount for those who subscribe after 2 or more trips within the same month.

App User Journey Optimization:

•Introduce in-app notifications after long or frequent trips with personalized suggestions: "You've taken 3 trips this month! Save 40% with the annual pass!“

A/B Testing with Trial Subscriptions:

•Offer a free or discounted monthly subscription for casual riders to experience the benefits of the subscription model.

Continuous Analysis and Personalization:

•Establish a monthly monitoring system of usage patterns to adjust campaigns based on real and seasonal behavior.

Contact

- This analysis was conducted individually by the author of these lines. Thank you for your time, and I am available to answer any questions or elaborate on any aspect of the analysis.

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Thank you very much!
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