

Cyclistic Rider Insights: From Casual Use to Committed Membership

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Introduction & Business Objective

Objective

Understand how casual and annual members use Cyclistic differently to develop strategies that convert casual riders into members.

Why this matters to Cyclistic's growth?

- **Annual Members lead to higher revenue and Retention**
- **Understanding behavior can lead to smarter marketing strategies**
- **Scaling infrastructure by maximizing existing user value**

Data Overview and Preparations

Data

- User data from quarter 1 of 2019 and 2020
- Around 1 million data entries
- Contains info like usertype, tripduration, etc.

trip_id	start_time	end_time	bikeid	tripduration	from_station	from_station	to_station_id	to_station_n	usertype	gender	birthyear
21742443	1/1/19 0:04	1/1/19 0:11	2167	390	199	Wabash Ave & ...	84	Milwaukee A	Subscriber	Male	1989
21742444	1/1/19 0:08	1/1/19 0:15	4386	441	44	State St & Ra	624	Dearborn St i	Subscriber	Female	1990
21742445	1/1/19 0:13	1/1/19 0:27	1524	829	15	Racine Ave &	644	Western Ave	Subscriber	Female	1994
21742446	1/1/19 0:13	1/1/19 0:43	252	1,783.00	123	California Av	176	Clark St & Elr	Subscriber	Male	1993
21742447	1/1/19 0:14	1/1/19 0:20	1170	364	173	Mies van der	35	Streeter Dr &	Subscriber	Male	1994
21742448	1/1/19 0:15	1/1/19 0:19	2437	216	98	LaSalle St & V	49	Dearborn St i	Subscriber	Female	1983
21742449	1/1/19 0:16	1/1/19 0:19	2708	177	98	LaSalle St & V	49	Dearborn St i	Subscriber	Male	1984
21742450	1/1/19 0:18	1/1/19 0:20	2796	100	211	St. Clair St &	142	McClurg Ct &	Subscriber	Male	1990
21742451	1/1/19 0:18	1/1/19 0:47	6205	1,727.00	150	Fort Dearbor	148	State St & 33	Subscriber	Male	1995
21742452	1/1/19 0:19	1/1/19 0:24	3939	336	268	Lake Shore D	141	Clark St & Lin	Subscriber	Male	1996
21742453	1/1/19 0:20	1/1/19 0:35	6243	886	299	Halsted St &	295	Broadway & /	Subscriber	Male	1994
21742454	1/1/19 0:21	1/1/19 0:32	6300	653	204	Prairie Ave &	420	Ellis Ave & 55	Subscriber	Female	1994
21742455	1/1/19 0:23	1/1/19 0:33	3029	601	90	Millennium P	255	Indiana Ave &	Subscriber	Male	1986
21742456	1/1/19 0:23	1/1/19 0:33	84	562	90	Millennium P	255	Indiana Ave &	Customer	Female	1990
21742457	1/1/19 0:23	1/1/19 0:39	5019	906	289	Wells St & Co	324	Stockton Dr i	Subscriber	Female	1989
21742458	1/1/19 0:24	1/1/19 0:39	5526	892	289	Wells St & Co	324	Stockton Dr i	Subscriber	Female	1989
21742459	1/1/19 0:24	1/1/19 0:31	3373	407	152	Lincoln Ave &	166	Ashland Ave i	Subscriber	Male	1967
21742460	1/1/19 0:24	1/1/19 0:47	5777	1,356.00	268	Lake Shore D	319	Greenview A	Customer	Female	1990
21742461	1/1/19 0:25	1/1/19 0:27	3940	102	35	Streeter Dr &	35	Streeter Dr &	Subscriber	Male	1985
21742463	1/1/19 0:29	1/1/19 1:08	3914	2,333.00	35	Streeter Dr &	39	Wabash Ave i	Customer		
21742464	1/1/19 0:29	1/1/19 0:45	140	960	47	State St & Kir	111	Sedgwick St i	Subscriber	Male	1957
21742465	1/1/19 0:29	1/1/19 1:07	3355	2,301.00	35	Streeter Dr &	39	Wabash Ave i	Customer		
21742466	1/1/19 0:29	1/1/19 0:49	5026	1,168.00	85	Michigan Ave	329	Lake Shore D	Subscriber	Male	1959
21742467	1/1/19 0:30	1/1/19 0:38	1998	474	289	Wells St & Co	313	Lakeview Ave	Subscriber	Male	1994
21742468	1/1/19 0:33	1/1/19 0:50	2630	1,036.00	13	Wilton Ave &	61	Wood St & Mi	Subscriber	Male	1991
21742469	1/1/19 0:34	1/1/19 0:38	3722	230	520	Greenview Av	523	Eastlake Ter	Subscriber	Male	1961
21742471	1/1/19 0:38	1/1/19 0:50	1166	747	256	Broadway & S	297	Paulina St & f	Subscriber	Male	1968
21742472	1/1/19 0:38	1/1/19 0:50	1704	711	256	Broadway & S	297	Paulina St & f	Subscriber	Male	1964
21742473	1/1/19 0:40	1/1/19 0:49	1476	553	254	Pine Grove Av	465	Marine Dr & /	Subscriber	Male	1990
21742474	1/1/19 0:41	1/1/19 0:50	4614	521	66	Clinton St & l	52	Michigan Ave	Subscriber	Male	1994
21742475	1/1/19 0:45	1/1/19 1:17	5583	1,934.00	464	Damen Ave &	30	Ashland Ave i	Subscriber	Male	1991
21742476	1/1/19 0:45	1/1/19 0:50	1158	255	418	Ellis Ave & 53	121	Blackstone A	Subscriber	Male	1988
21742477	1/1/19 0:46	1/1/19 0:51	2314	307	144	Larrabee St &	313	Lakeview Ave	Subscriber	Female	1961
21742478	1/1/19 0:47	1/1/19 0:54	1411	427	253	Winthrop Ave	463	Clark St & Be	Subscriber	Male	1984
21742479	1/1/19 0:48	1/1/19 0:59	6336	655	304	Broadway & V	332	Burling St (H	Subscriber	Male	1988
21742480	1/1/19 0:51	1/1/19 0:54	5629	174	206	Halsted St &	135	Halsted St &	Subscriber	Male	1989
21742481	1/1/19 0:55	1/1/19 0:57	5248	120	522	Bosworth Ave	520	Greenview A	Subscriber	Male	1976
21742483	1/1/19 0:58	1/1/19 1:15	5875	1,044.00	144	Larrabee St &	185	Stave St & Ari	Subscriber	Male	1989
21742484	1/1/19 0:58	1/1/19 1:05	6312	404	193	State St & 29	120	Wentworth A	Subscriber	Male	1992
21742485	1/1/19 0:58	1/1/19 1:07	781	541	260	Kedzie Ave &	507	Humboldt Bl	Subscriber	Male	1988
21742486	1/1/19 0:58	1/1/19 1:07	2448	535	260	Kedzie Ave &	507	Humboldt Bl	Subscriber	Female	1988
21742487	1/1/19 1:02	1/1/19 1:22	368	1,147.00	636	Orleans St &	214	Damen Ave &	Customer	Male	1988
21742488	1/1/19 1:03	1/1/19 1:08	1170	278	35	Streeter Dr &	173	Mies van der	Subscriber	Male	1994
21742489	1/1/19 1:04	1/1/19 1:19	297	909	240	Sheridan Rd i	465	Marine Dr & /	Subscriber	Male	1993
21742490	1/1/19 1:04	1/1/19 1:10	1998	383	313	Lakeview Ave	127	Lincoln Ave &	Subscriber	Female	1993
21742491	1/1/19 1:04	1/1/19 1:22	3942	1,059.00	636	Orleans St &	214	Damen Ave &	Customer	Female	1989
21742492	1/1/19 1:06	1/1/19 1:19	1018	813	240	Sheridan Rd i	465	Marine Dr & /	Subscriber	Female	1991
21742493	1/1/19 1:09	1/1/19 1:16	3183	466	253	Winthrop Ave	344	Ravenswood	Subscriber	Male	1988
21742494	1/1/19 1:10	1/1/19 1:32	2517	1,300.00	290	Kedzie Ave &	476	Kedzie Ave &	Customer		

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Divvy_Trips_2019_Q1 - Divvy_Tri

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Data Cleansing

2020

- Removed
 - start_lat
 - start_lng
 - end_lat
 - end_lng
 - rideable_type
- Renaming
 - ride_id -> trip_id
 - member_casual to usertype
 - member -> Subscriber
 - casual -> Customer
 - start_station_name -> from_station_name
 - start_station_id -> from_station_id
 - started_at -> start_time
 - ended_at -> end_time
 - end_station_name -> to_station_name
 - end_station_name -> to_station_name
 - end_station_id -> to_station_id
- Addition
 - day
 - tripduration

2019

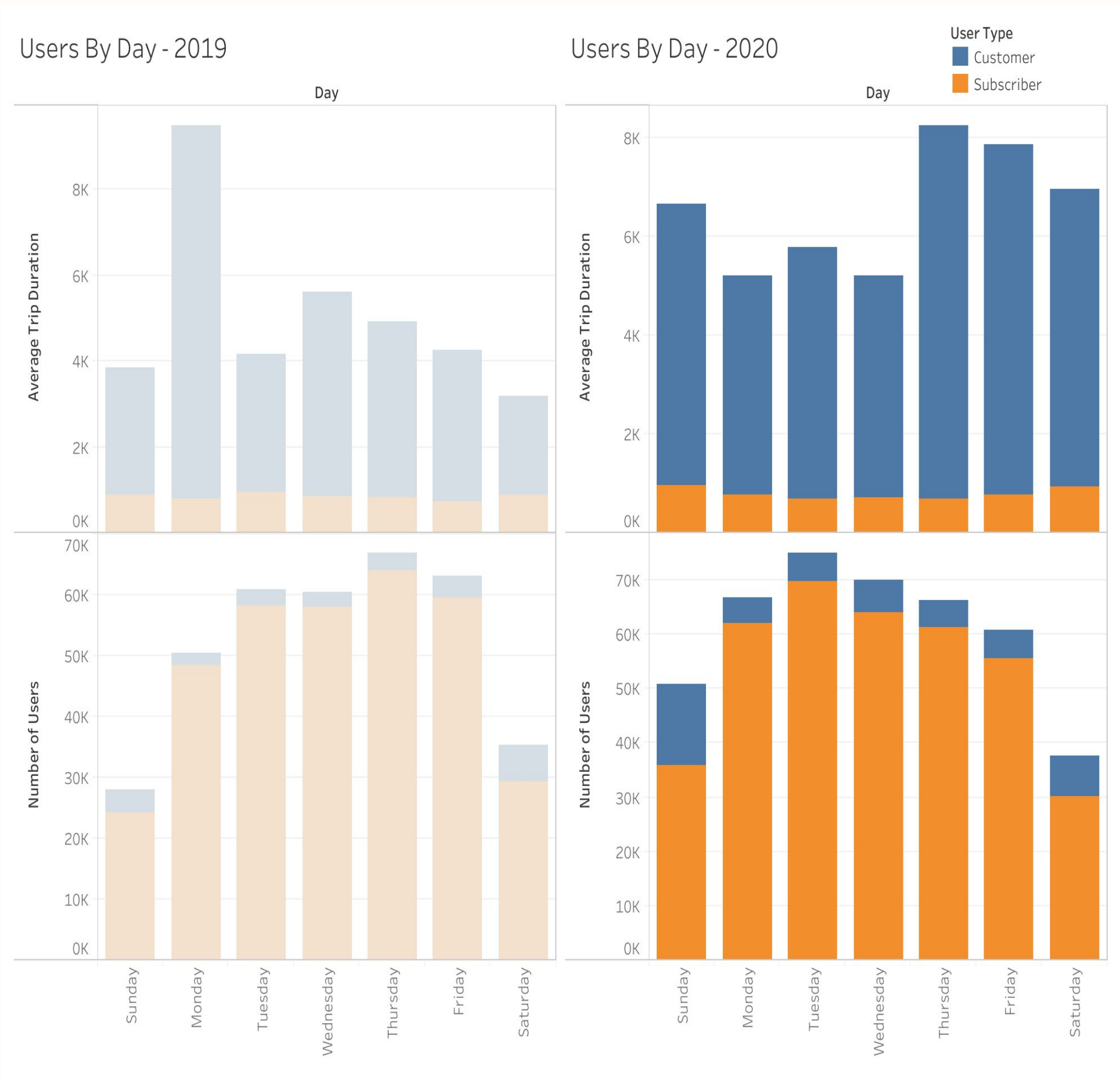
- Addition
 - day
 - age

trip_id	start_time	end_time	day	bikeid	tripduration	from_station_id	from_station_name	to_station_id	to_station_name	usertype	gender	age	birthyear
21742443	1/1/19 0:04	1/1/19 0:11	Tuesday	2167	390	199	Wabash Ave & Grand Ave	84	Milwaukee Ave & Grand Ave	Subscriber	Male	30	1989
21742444	1/1/19 0:08	1/1/19 0:15	Tuesday	4386	441	44	State St & Randolph St	624	Dearborn St & Van Buren St (*)	Subscriber	Female	29	1990
21742445	1/1/19 0:13	1/1/19 0:27	Tuesday	1524	829	15	Racine Ave & 18th St	644	Western Ave & Fillmore St (*)	Subscriber	Female	25	1994
21742446	1/1/19 0:13	1/1/19 0:43	Tuesday	252	1783	123	California Ave & Milwaukee Ave	176	Clark St & Elm St	Subscriber	Male	26	1993
21742447	1/1/19 0:14	1/1/19 0:20	Tuesday	1170	364	173	Mies van der Rohe Way & Chicago Av	35	Streeter Dr & Grand Ave	Subscriber	Male	25	1994
21742448	1/1/19 0:15	1/1/19 0:19	Tuesday	2437	216	98	LaSalle St & Washington St	49	Dearborn St & Monroe St	Subscriber	Female	36	1983
21742449	1/1/19 0:16	1/1/19 0:19	Tuesday	2708	177	98	LaSalle St & Washington St	49	Dearborn St & Monroe St	Subscriber	Male	35	1984
21742450	1/1/19 0:18	1/1/19 0:20	Tuesday	2796	100	211	St. Clair St & Erie St	142	McClurg Ct & Erie St	Subscriber	Male	29	1990
21742451	1/1/19 0:18	1/1/19 0:47	Tuesday	6205	1727	150	Fort Dearborn Dr & 31st St	148	State St & 33rd St	Subscriber	Male	24	1995
21742452	1/1/19 0:19	1/1/19 0:24	Tuesday	3939	336	268	Lake Shore Dr & North Blvd	141	Clark St & Lincoln Ave	Subscriber	Male	23	1996
21742453	1/1/19 0:20	1/1/19 0:35	Tuesday	6243	886	299	Halsted St & Roscoe St	295	Broadway & Argyle St	Subscriber	Male	25	1994
21742454	1/1/19 0:21	1/1/19 0:32	Tuesday	6300	653	204	Prairie Ave & Garfield Blvd	420	Ellis Ave & 55th St	Subscriber	Female	25	1994
21742455	1/1/19 0:23	1/1/19 0:33	Tuesday	3029	601	90	Millennium Park	255	Indiana Ave & Roosevelt Rd	Subscriber	Male	33	1986
21742456	1/1/19 0:23	1/1/19 0:33	Tuesday	84	562	90	Millennium Park	255	Indiana Ave & Roosevelt Rd	Customer	Female	29	1990
21742457	1/1/19 0:23	1/1/19 0:39	Tuesday	5019	906	289	Wells St & Concord Ln	324	Stockton Dr & Wrightwood Ave	Subscriber	Female	30	1989
21742458	1/1/19 0:24	1/1/19 0:39	Tuesday	5526	892	289	Wells St & Concord Ln	324	Stockton Dr & Wrightwood Ave	Subscriber	Female	30	1989
21742459	1/1/19 0:24	1/1/19 0:31	Tuesday	3373	407	152	Lincoln Ave & Diversey Pkwy	166	Ashland Ave & Wrightwood Ave	Subscriber	Male	52	1967
21742460	1/1/19 0:24	1/1/19 0:47	Tuesday	5777	1356	268	Lake Shore Dr & North Blvd	319	Greenview Ave & Diversey Pkwy	Customer	Female	29	1990
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21742463	1/1/19 0:29	1/1/19 1:08	Tuesday	3914	2333	35	Streeter Dr & Grand Ave	39	Wabash Ave & Adams St	Customer			
21742464	1/1/19 0:29	1/1/19 0:45	Tuesday	140	960	47	State St & Kinzie St	111	Sedgwick St & Huron St	Subscriber	Male	62	1957
21742465	1/1/19 0:29	1/1/19 1:07	Tuesday	3355	2301	35	Streeter Dr & Grand Ave	39	Wabash Ave & Adams St	Customer			
21742466	1/1/19 0:29	1/1/19 0:49	Tuesday	5026	1168	85	Michigan Ave & Oak St	329	Lake Shore Dr & Diversey Pkwy	Subscriber	Male	60	1959
21742467	1/1/19 0:30	1/1/19 0:38	Tuesday	1998	474	289	Wells St & Concord Ln	313	Lakeview Ave & Fullerton Pkwy	Subscriber	Male	25	1994
21742468	1/1/19 0:33	1/1/19 0:50	Tuesday	2630	1036	13	Wilton Ave & Diversey Pkwy	61	Wood St & Milwaukee Ave	Subscriber	Male	28	1991
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21742476	1/1/19 0:45	1/1/19 0:50	Tuesday	1158	255	418	Ellis Ave & 53rd St	121	Blackstone Ave & Hyde Park Blvd	Subscriber	Male	31	1988
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21742478	1/1/19 0:47	1/1/19 0:54	Tuesday	1411	427	253	Winthrop Ave & Lawrence Ave	463	Clark St & Berwyn Ave	Subscriber	Male	35	1984
21742479	1/1/19 0:48	1/1/19 0:59	Tuesday	6336	655	304	Broadway & Waveland Ave	332	Burling St (Halsted) & Diversey Pkwy (Temp)	Subscriber	Male	31	1988
21742480	1/1/19 0:51	1/1/19 0:54	Tuesday	5629	174	206	Halsted St & Archer Ave	135	Halsted St & 21st St	Subscriber	Male	30	1989
21742481	1/1/19 0:55	1/1/19 0:57	Tuesday	5248	120	522	Bosworth Ave & Howard St	520	Greenview Ave & Jarvis Ave	Subscriber	Male	43	1976
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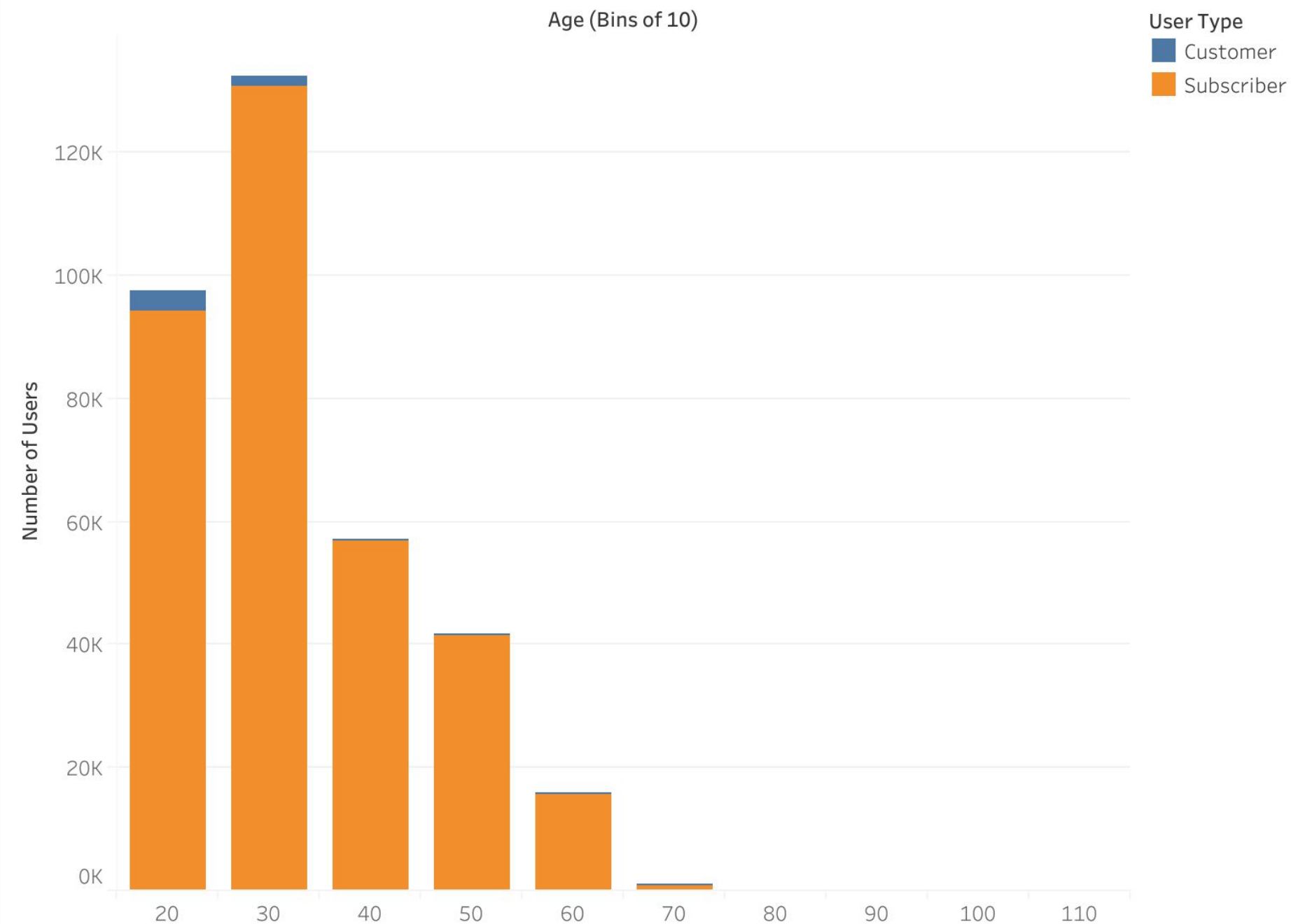
Exploratory Data Analysis

Users By Day

- Users tend to ride more on weekdays
- There are a lot more subscribers than casual customers
- Casual customers have a greater average trip duration than subscribers



Age of Users - 2019



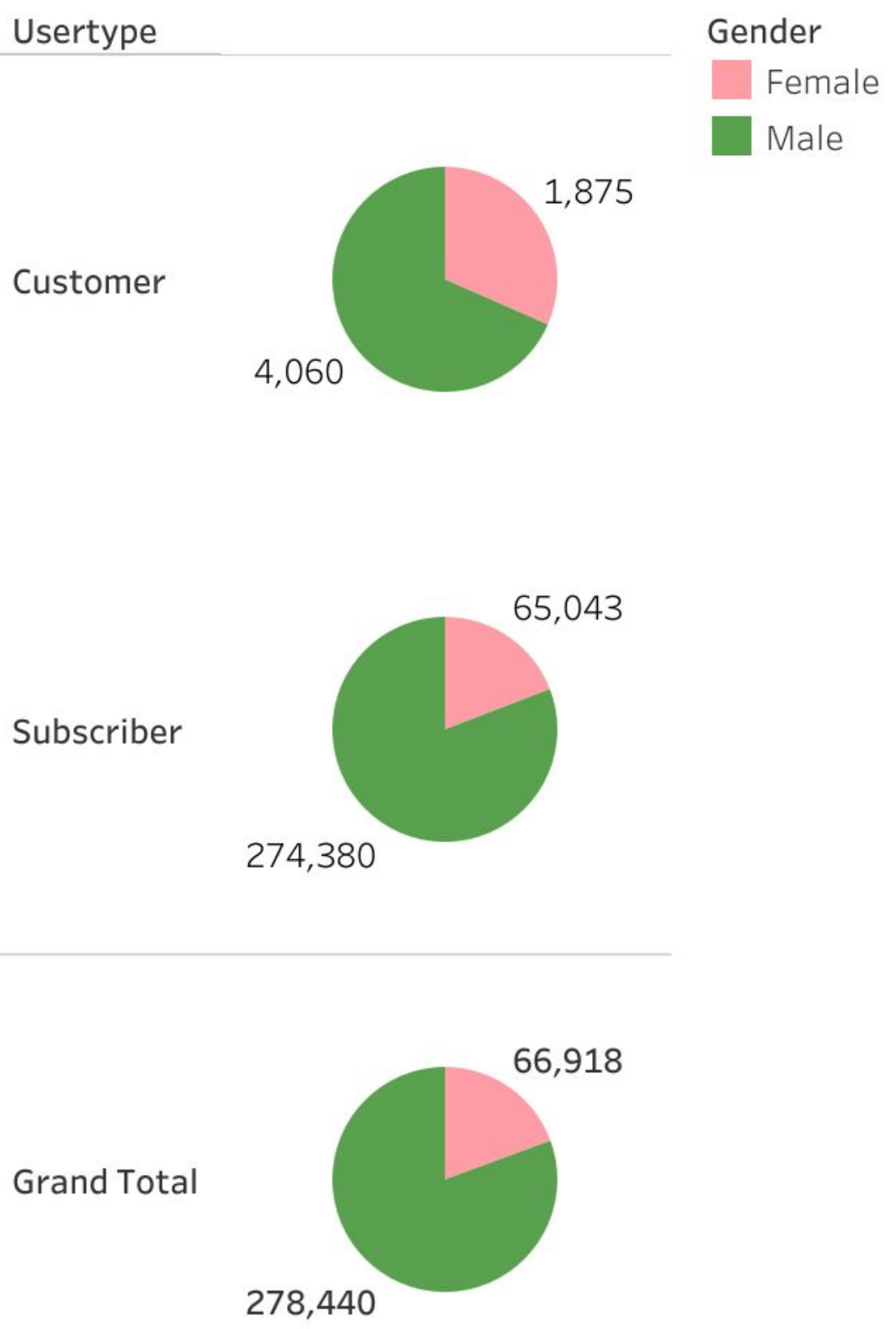
Ages of Users

- Tended to be of age 20-30
- Users dropped as age progressed

Gender of Users

- Male dominated
 - Over 75%

Gender of Users - 2019



Marketing Recommendations

Recommendations

- **Target Young Adults (Ages 20–30)**
 - Since most casual riders are 20–30, focus digital ads (Instagram, TikTok, YouTube) toward this demographic
- **Promote Weekday Commuting Value**
 - Casual riders are active on weekdays—position the membership as the smarter option for frequent use, especially for commuting
- **Leverage Longer Trip Duration**
 - Casual riders ride longer—promote how members get unlimited rides for less



Questions?

Thanks