

Project Juniper

New York Launch

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Agenda



1. Overall Month Performance

- a. Executive Summary
- b. Key KPIs
- c. What's Going Well
- d. What's Not Going Well

2. Recommendations

- a. Top of Funnel for New Users
- b. Merchant Recommendations
- c. Improve Courier Retention

3. Experimentation

Executive Summary



Launch Performance

- We saw an immediate boom in adoption from merchants, users and couriers.
- Our orders have stabilized around 1000 orders a week but we are seeing a decline in AOV, user signup and merchant signup rates.

Recommendations:

1. Targeted Merchant Acquisition with BDR teams - P0
2. Courier Wait Time Reduction - P1
3. Promotions in high-order zones - P2

Experiment / Action Plan:

- Work with engineering and marketing teams to promote low volume high value merchants

KPI Overview



Stable KPIs

- **Delivery times:** *Average delivery times have ranged from ~38 to ~52 minutes per delivery with an overall average of 45.2 minutes*
- **Completed Deliveries:** ~1042/Week

Focus KPIs

- **Courier Churn:** *Significant drop after delivery #1 and delivery #4 (Slides 8 & 17)*
- **New User Growth Diminishing:** *Over the first week our signups were ~140/day - have since dropped to ~75/day (Slide 11)*
- **Avg Order Value:** *Over the last 30 days, the AOV has decreased 15%, with a drop from \$26.92 to \$22.83 (APPENDIX C)*



Recommendations

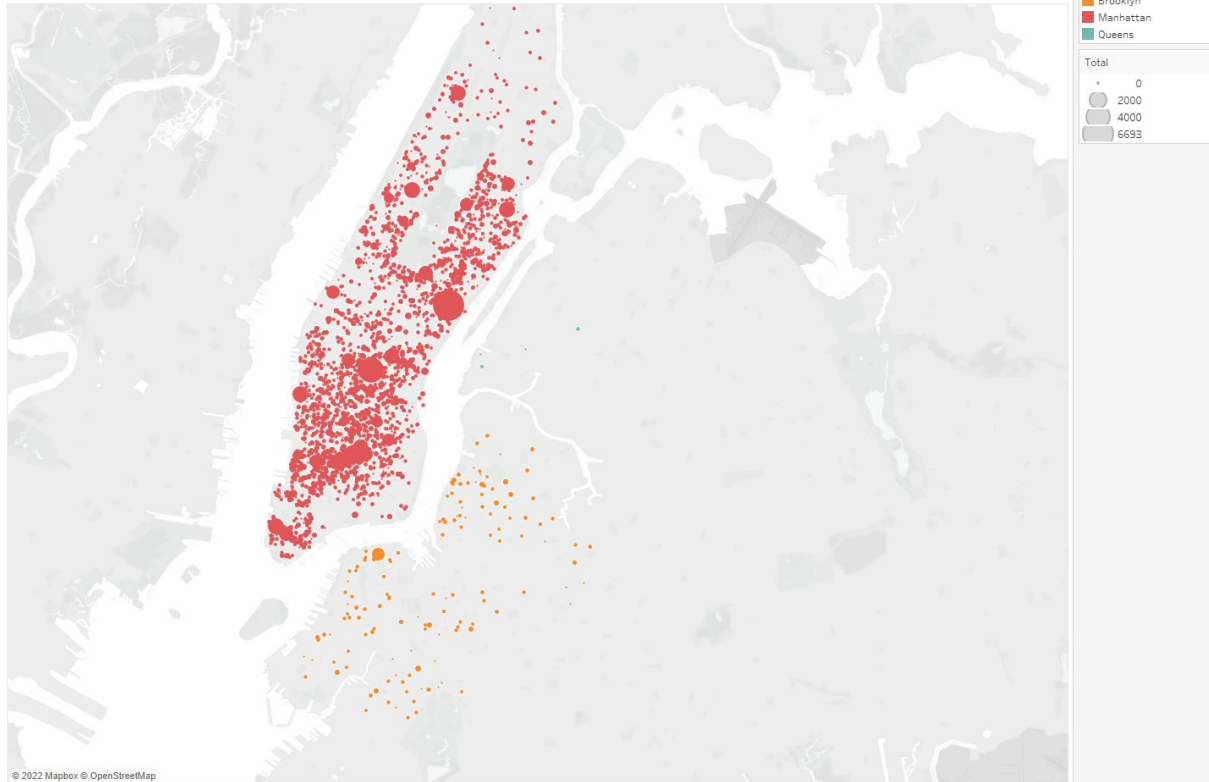
Users

User Locations



- User base is largely isolated to Manhattan
- Manhattan also accounts for our largest orders while Brooklyn also has a decent amount of orders

Customer Locations/Order Size

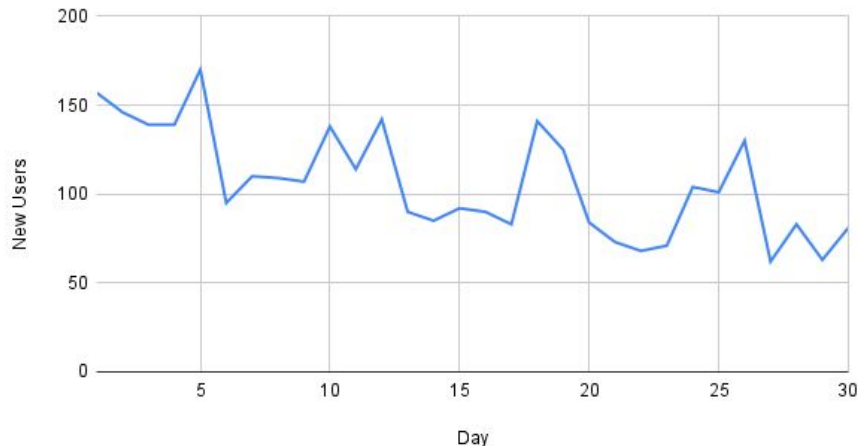


Active Users Steady, Repeat Users Growing

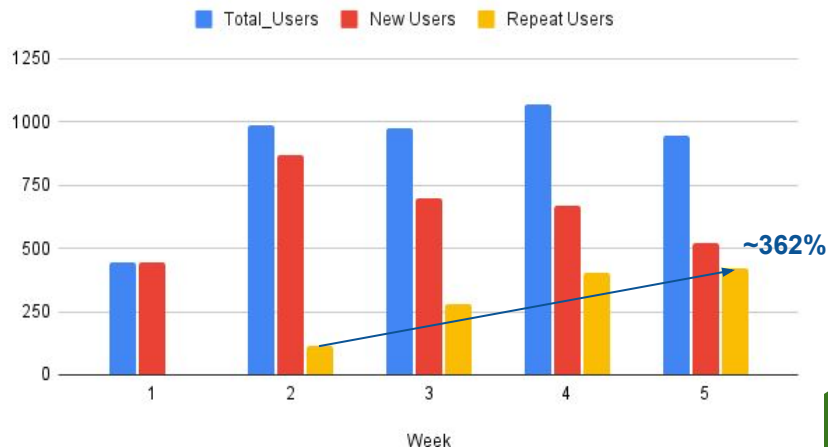


- Total users (based on orders) are staying constant
- However, user signups are slowing quickly; ~48% decrease in user signups from day 1 - day 30
- Seeing an increase in repeat users; ~362% increase from week 2 - week 5

User Signups Over Month



User Growth WoW



Time Between Subsequent Orders



- Habits forming in the user base - ordering more frequently with every subsequent order
- Tail-end results can be ignored due to lack of data - trend shows strength between 2-8 orders

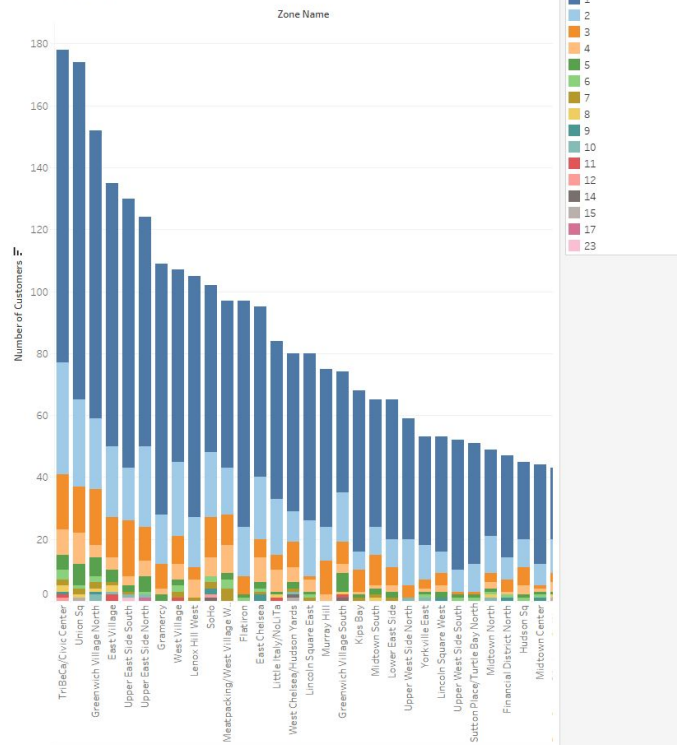


Increase Top Line User Growth

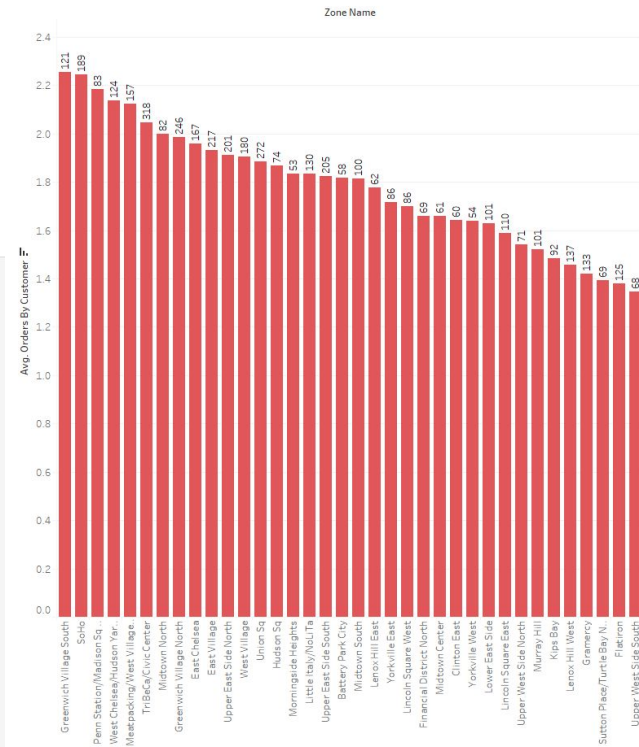


- Largely we are seeing success in creating habits with our users
- Recommendation - work with marketing and discounts team to promote further in our high order areas where we have success in retaining orders
- Greenwich village/SOHO/West Chelsea
- This will drive new user growth in areas where there is minimal drop off
- Outside of Manhattan our Focus should be in Dumbo/Vinegar Hill (not enough orders for meaningful trend but 22 orders with high retention
- Impact will be more "power users" with higher retention and lower dropoff

Orders by Zone



Avg Orders per Customer By Zone





Recommendations

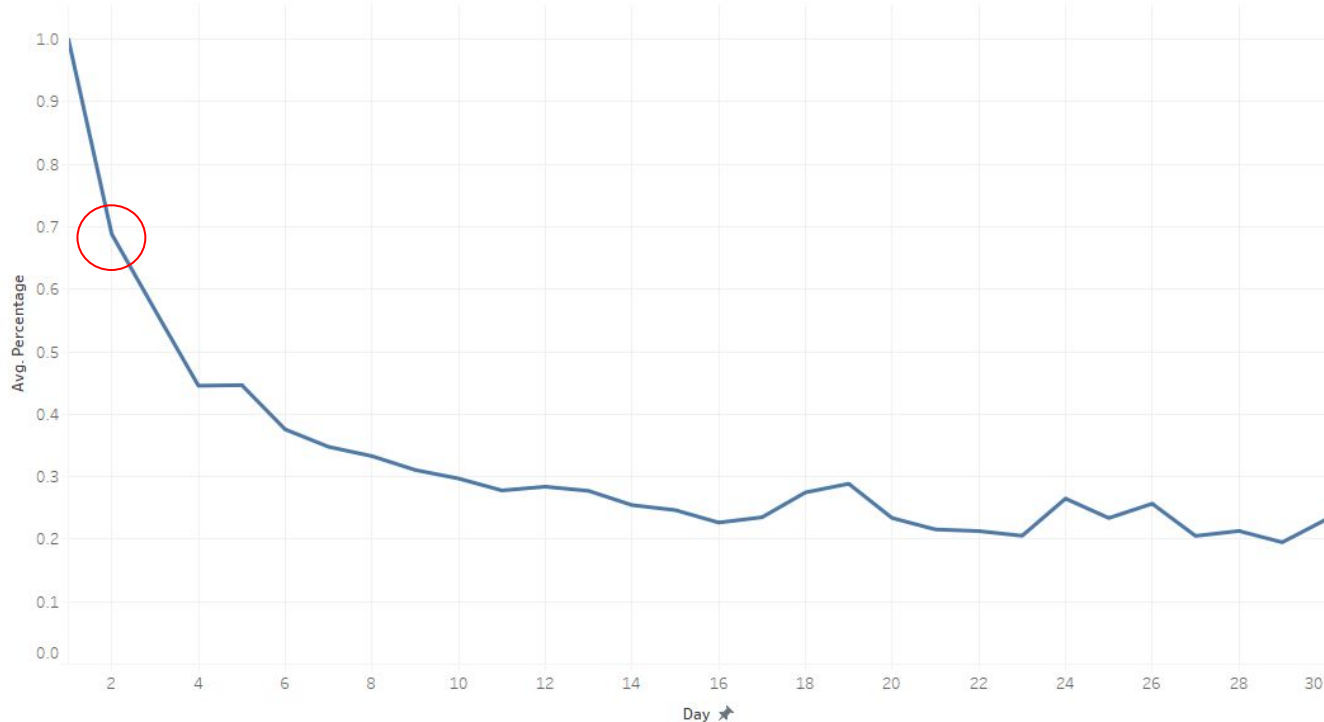
Couriers

Courier Churn / Retention Issue

The largest drop-off of couriers occurs after their first delivery



Courier Retention

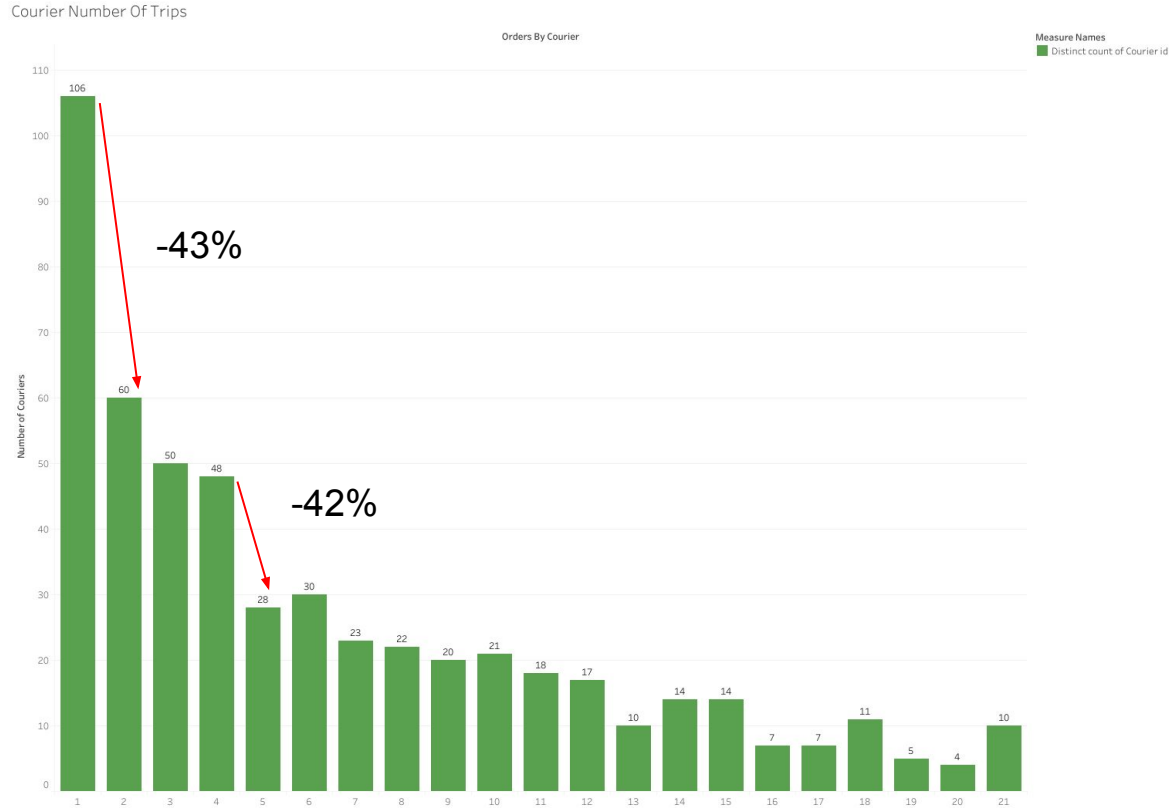


The trend of average of Percentage for Day.

Courier Churn / Retention Issue



- Drop off of 43% from first time deliveries to those that are coming back for a second courier
- Another 42% drop-off between trip 4 and 5

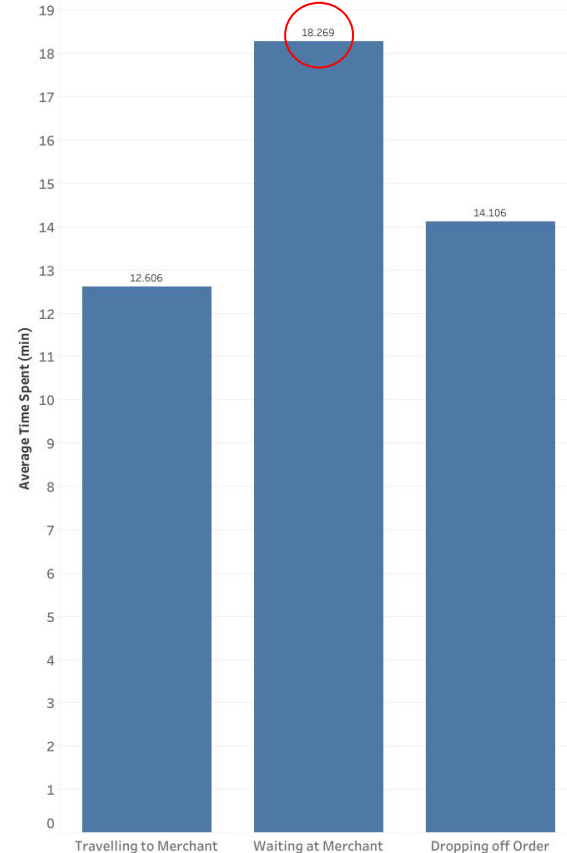


Delivery Time Distribution

- Waiting at Merchant is a clear bottleneck for Couriers
- This is causing low retention especially after they have one bad experience



Average Time Spent in Each Stage of Delivery

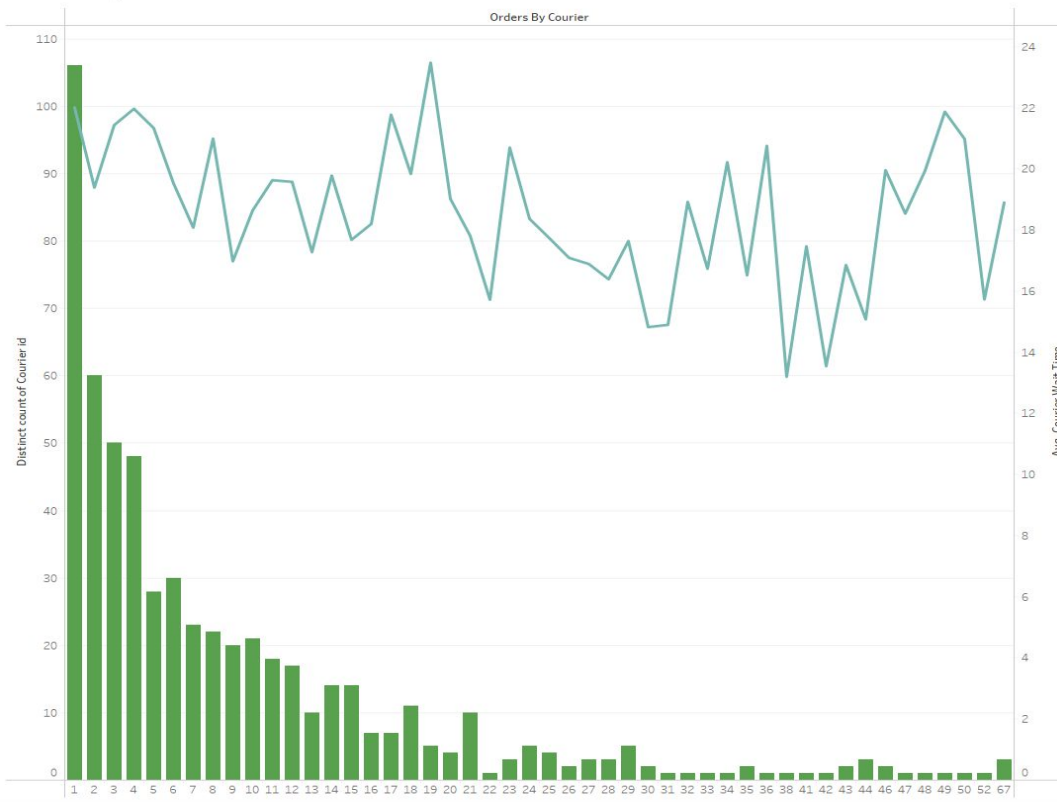


Reduce Courier Wait Time



- Ultimate goal is to increase courier retention
- Lever to use here is reducing courier wait time
- Couriers are waiting on average ~18 minutes at the pick-up location
- Work with our success team and encourage quicker merchant preparation
- Alternatively, financially incentivize couriers to complete order number 2 and then order number 5

Courier Dropoff Based on Wait Time





Recommendations

Merchants

Dropping AOV dampens revenue gains

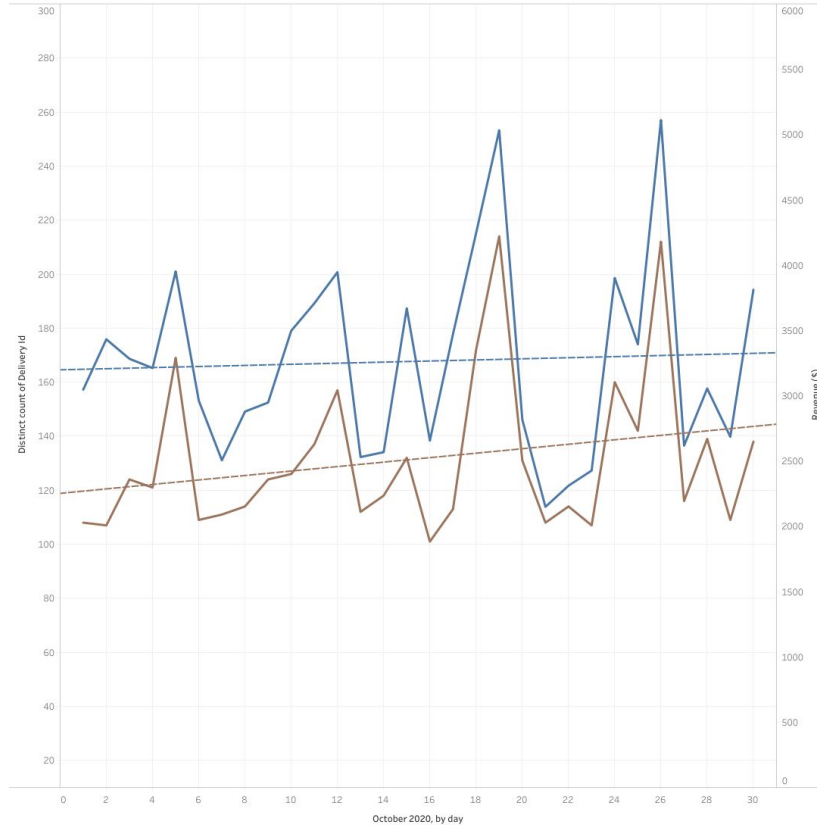
Revenue: +3.8%

AOV: -15.1%

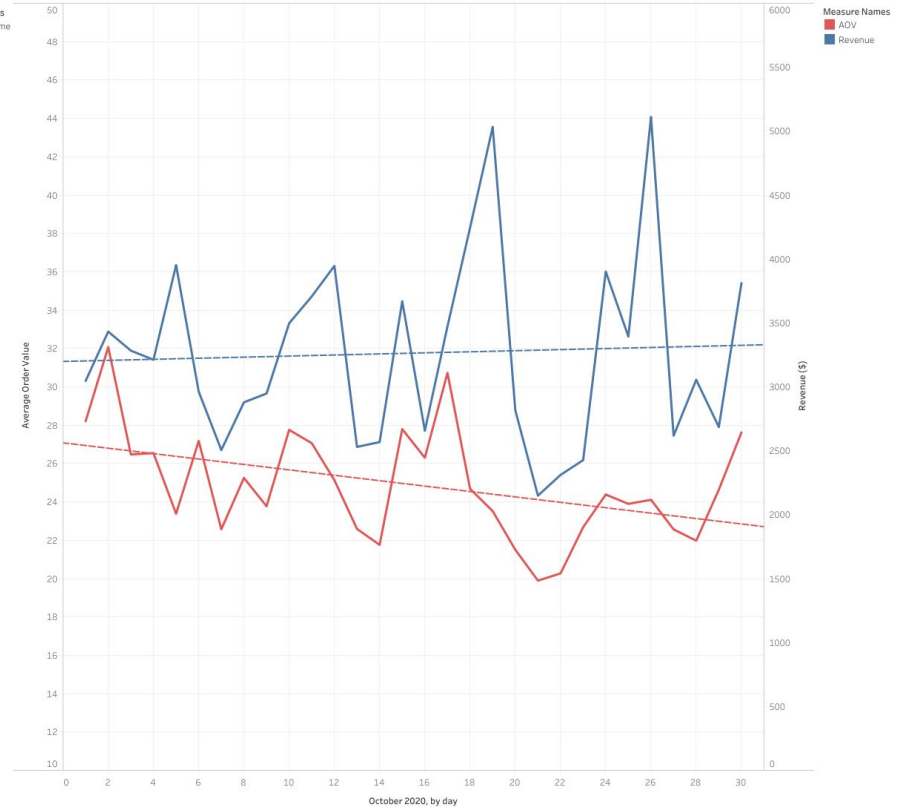
Volume: +20.1%



Order Volume vs Revenue



Average Order Value vs Revenue



Focus on High Value Merchants to bring up AOV



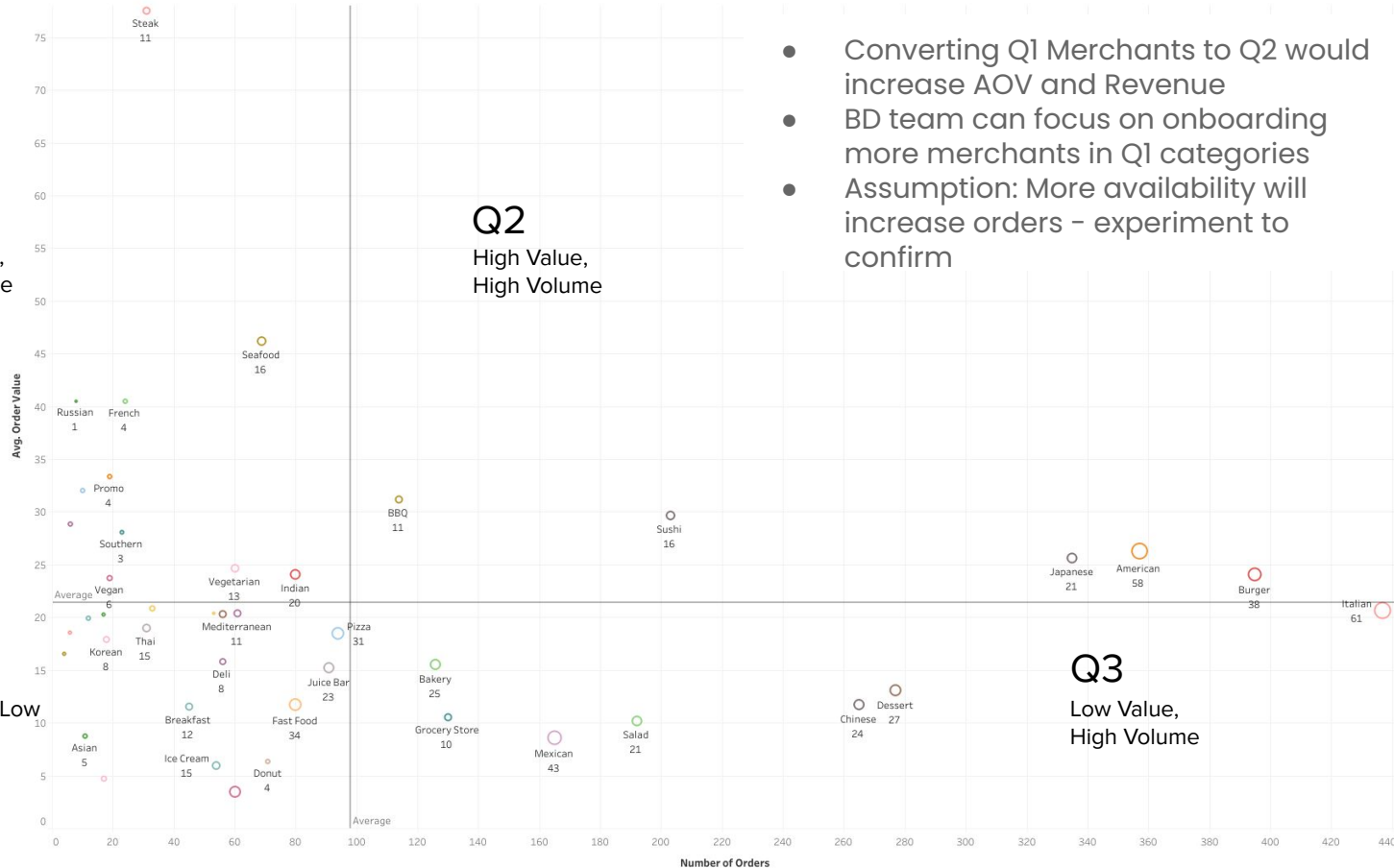
Q1
High Value,
Low Volume

Q2
High Value,
High Volume

- Converting Q1 Merchants to Q2 would increase AOV and Revenue
- BD team can focus on onboarding more merchants in Q1 categories
- Assumption: More availability will increase orders - experiment to confirm

Q4
Low Value, Low
Volume

Q3
Low Value,
High Volume



Summary



Priority	Recommendation	Impact	Time to Implement	Resourcing
0	Targeted Merchant Expansion	Higher AOV, higher Revenue	2-4 weeks	Promotions / Business Development
1	Courier Wait Time Reduction	Increased Courier Retention	4 weeks	Promotions/Busin ess Development
2	Promotions/Discounts in high-order zones	More Repeat Users	4 weeks	Marketing



Experimentation

Experiment



Hypothesis	User drop off comes from a lack of options on the merchant side, or ease of finding these options. If we can promote merchants that are high value and high volume we should see more success.
Goal	Increase user order #s as well as AOV
Tactics	Work with engineering and marketing teams to promote low volume high value merchants (Quadrant 1)
Experiment	Divide Users in manhattan into 2 cohorts: <ol style="list-style-type: none">1. Group A sees Quadrant 1 merchants (low volume/high value) towards the top of their search feeds2. Group B sees their feed/suggestions as is
KPIs	% of repeat users in Group A and overall increase in AOV on group A orders
ROI	User Stickiness and increased Revenue
Scaling Plan	If successful, make this standard practice across users and implement in other boroughs as we expand

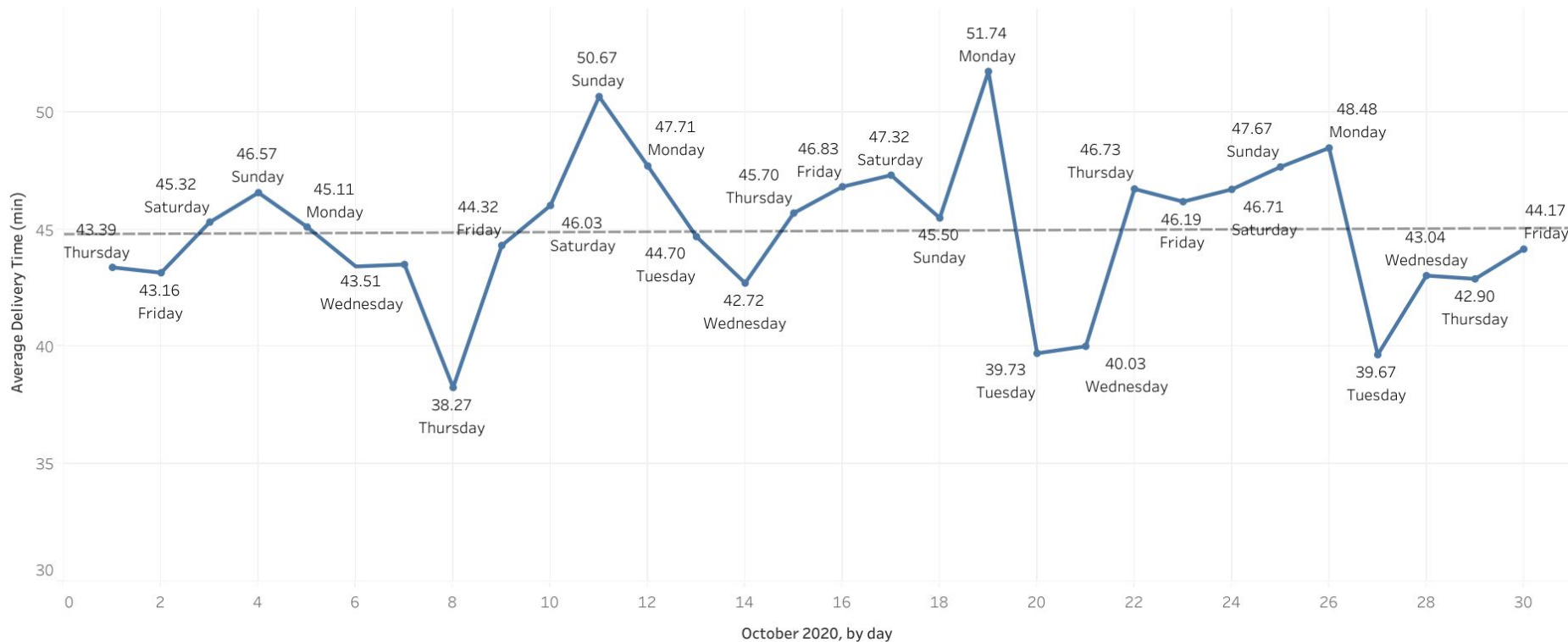


Questions?

APPENDIX A - Delivery Times are Stable



Average delivery times have ranged from ~38 to ~52 minutes per delivery with an overall average of 45.2 minutes

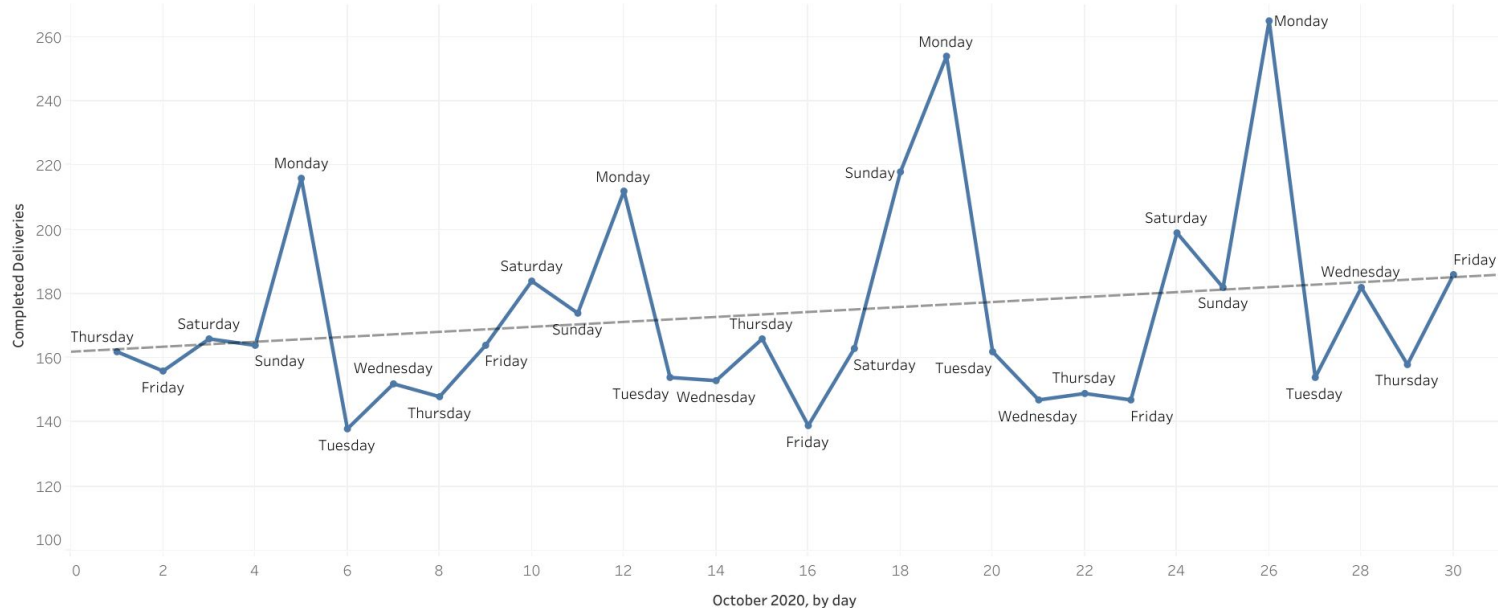
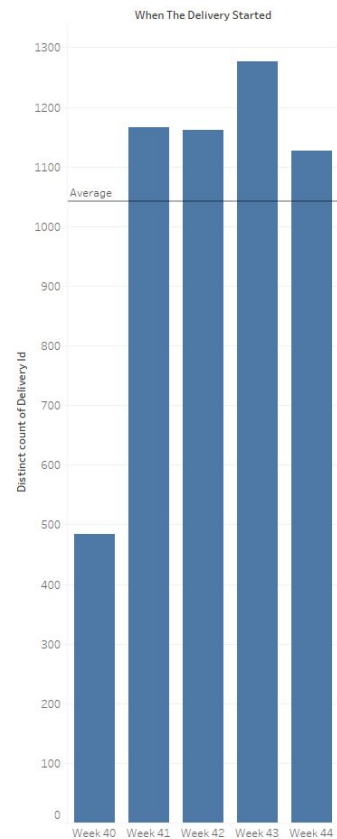


APPENDIX B - Completed Deliveries



Average Orders per week are stable around 1042

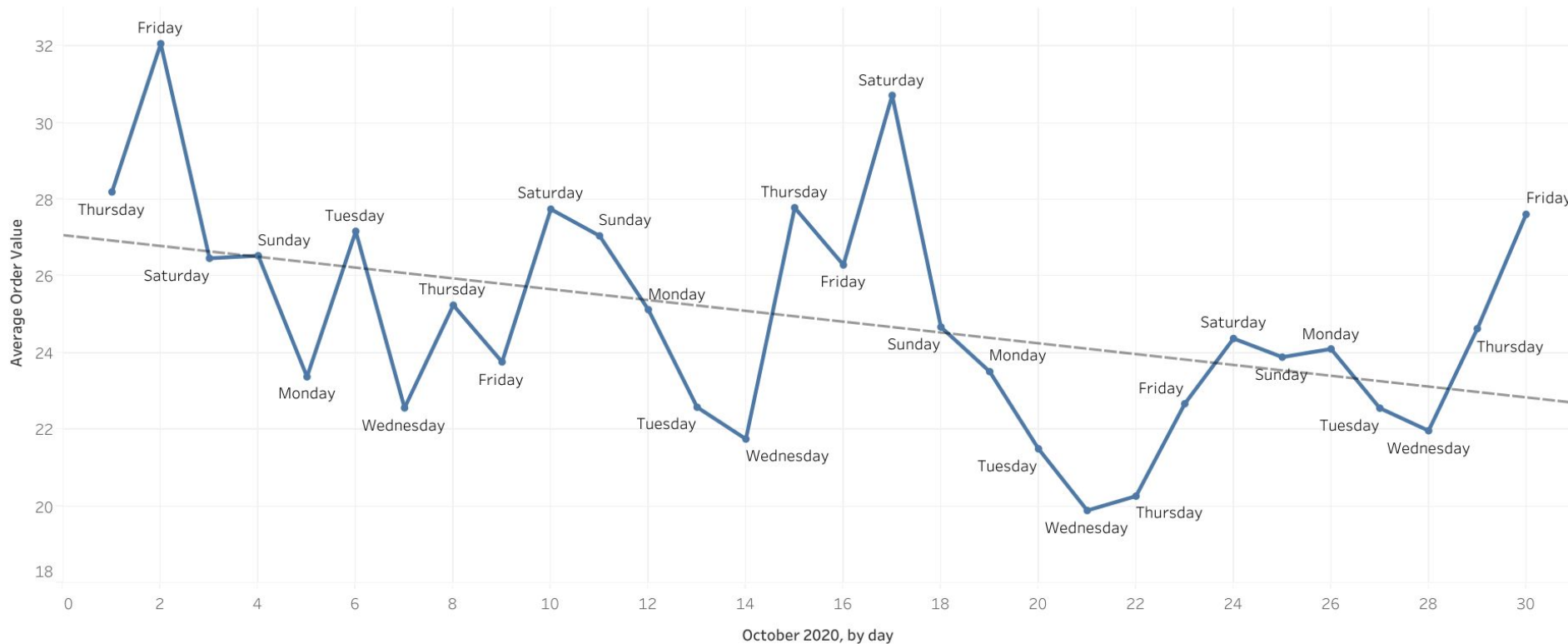
Deliveries/Week



Appendix C



Over the last 30 days, the AOV has decreased 15%, with a drop from \$26.92 to \$22.83



Appendix D - Alternative Experiment



Hypothesis	Courier Retention is a key metric to address and dropoff is particularly steep after 1 delivery and 5 deliveries. Incentivizing couriers to hit delivery number thresholds can increase retention
Goal	Increase courier retention
Tactics	Work with marketing and courier teams to introduce one-time bonuses for couriers on completion of 2nd and 5th deliveries
Location	Targeting new Manhattan couriers - the area with the most historic data
Control Group	Divide Couriers into 2 cohorts: <ol style="list-style-type: none">1. Half of new courier signups get bonuses issued on 2nd and 5th delivery2. Half of new couriers get no bonus incentives
KPIs	% Courier Dropoff on 2nd and 5th delivery compared to historical and control group
ROI	Increase in Courier retention
Scaling Plan	If successful, make this standard practice across boroughs as we expand

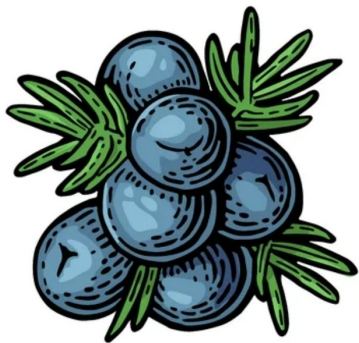
Recommendation Summary



Speed to Implementation

Impact to Metrics

Order of recs (prioritize)



Project Juniper

New York Launch

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What Metric Are You Working On



Add Your Code Here

Bullet point of output and insight

- Insight
- Insight
- Insight
- Etc.

Signup Growth Rate



With startday as (

SELECT

distinct customer_id,

extract(day from min(when_the_delivery_started)) day

FROM Skillful_Data.Project_Data

group by 1

)

Select

day,

count(customer_id) New_Customers

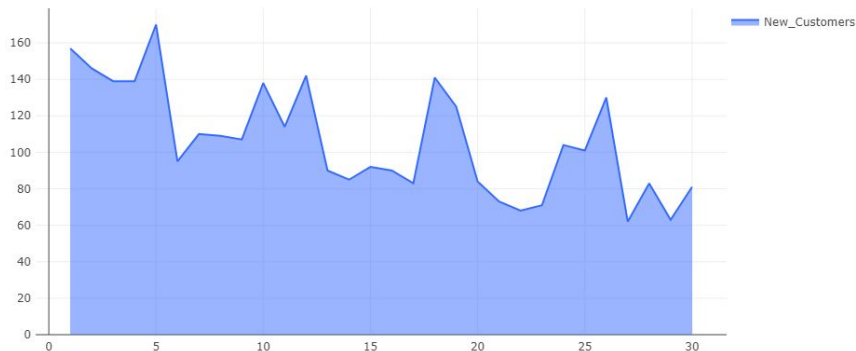
From startday

Group by 1

Order by 1

Bullet point of output and insight

- Net new signups are decreasing over the month



Signups by Zone/Borough



With startday as (

```
SELECT
```

```
distinct customer_id,
```

```
Dropoff_Zone_ID,
```

```
extract(day from min(when_the_delivery_started)) day
```

```
FROM Skillful_Data.Project_Data
```

```
group by 1, 2
```

```
)
```

Select

```
distinct zone_name,
```

```
borough,
```

```
count(customer_id) New_Customers
```

From startday join Skillful_Data.Zone_Information as zi

```
on cast(startday.Dropoff_Zone_ID as int64) = cast(zi.zone_id as int64)
```

Group by 1,2

Order by 3 desc

Bullet point of output and insight

- Signups good in Tribeca and union sq (Manhattan)
- Struggles in Queens/Brooklyn

Signups by Borough

- Manhattan accounts for most of new signups and has the same trend as the overall data
- Brooklyn had a similar story throughout the month
- Queens had 4 signups total



With startday as (

SELECT

distinct customer_id,

Dropoff_Zone_ID,

extract(day from min(when_the_delivery_started)) day

FROM Skillful_Data.Project_Data

group by 1, 2

)

Select

day,

count(customer_id) New_Customers

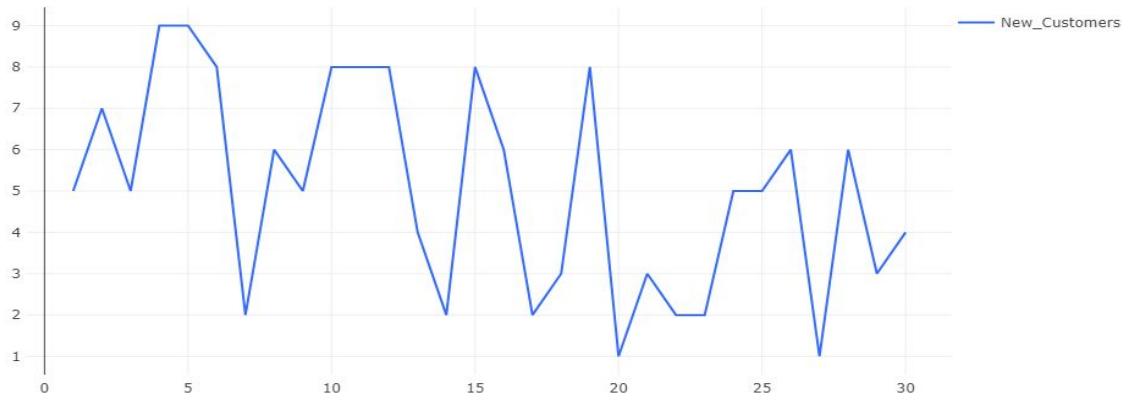
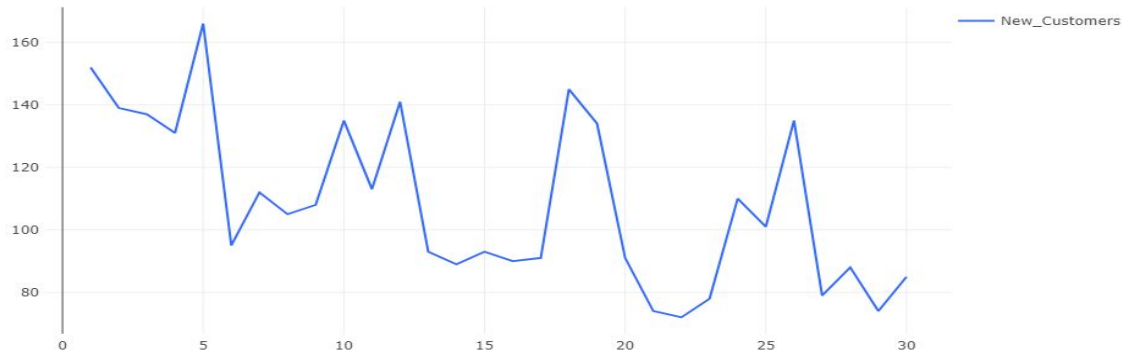
From startday join Skillful_Data.Zone_Information as zi

on cast(startday.Dropoff_Zone_ID as int64) = cast(zi.zone_id as int64)

where borough = 'Manhattan'

Group by 1

Order by 1



Delivery Growth



-- Total Deliveries by zone

Select

```
extract(day from  
when_the_Courier_arrived_at_dro  
poff),
```

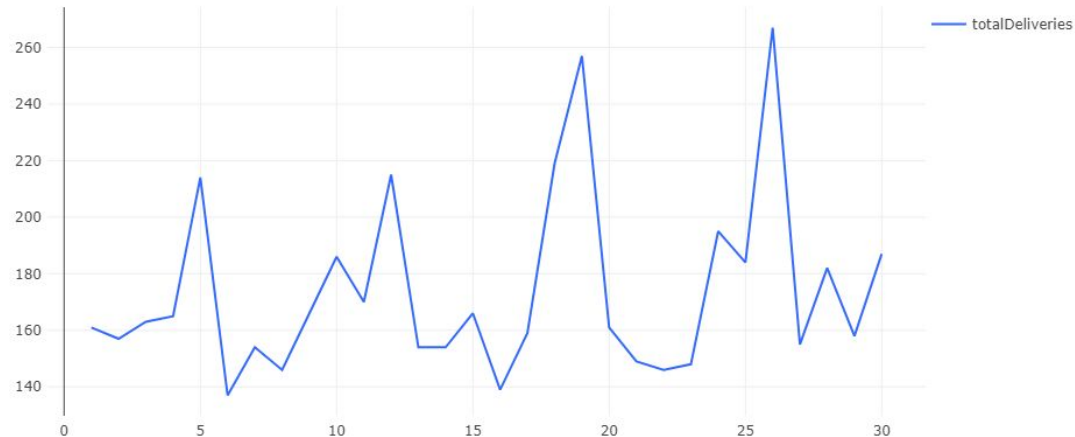
```
count(distinct delivery_id)  
totalDeliveries
```

```
FROM Skillful_Data.Project_Data
```

```
Group by 1
```

```
order by 1
```

- Deliveries are growing over time with peaks happening on weekends

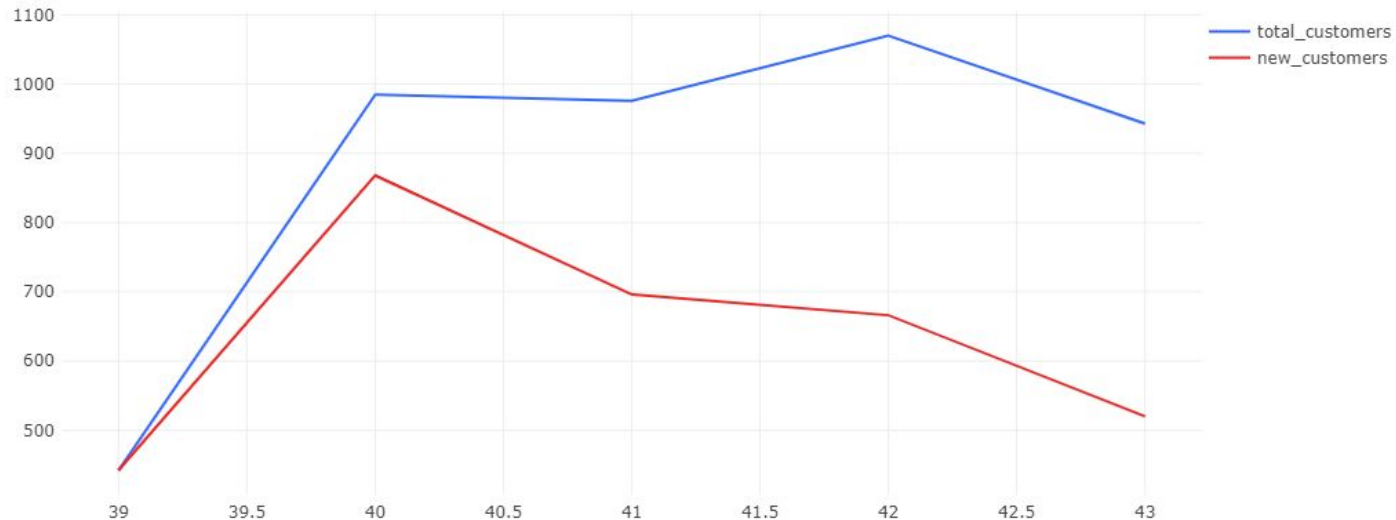


Customer Growth Weekly



Total orders growing but slowed in final week

Customer acquisition slowed dramatically



Experiment



Experiment Skeleton

Experiment around rec 3

urier

Hypothesis	<i>Restate the insight + recommendation leading to this experiment</i>
Goal	<i>State the concrete goal you're trying to achieve with this experiment. For example, "Reduce merchant wait time by X minutes to reach competitor benchmark of Y in order to see benefit of Z"</i>
Tactics	<i>1/ How you're doing this 2/ How you're doing this 3/ How you're doing this</i>
Location	<i>What is your test market & methodology? Why?</i>
Control Group	<i>What is your control group? Why?</i>
KPIs	<i>What metrics will you measure that will indicate clear success of your goal?</i>
ROI	<i>Expected return on investment from implementing this test; make a walk on how much you think it will cost to run this & expected benefit, given your tactics, and have that in your appendix. Only detail needed here is the expected ROI.</i>
Scaling plan (If successful)	<i>What will you do next, if this is successful?</i>

Repeat Users Are Actually Present

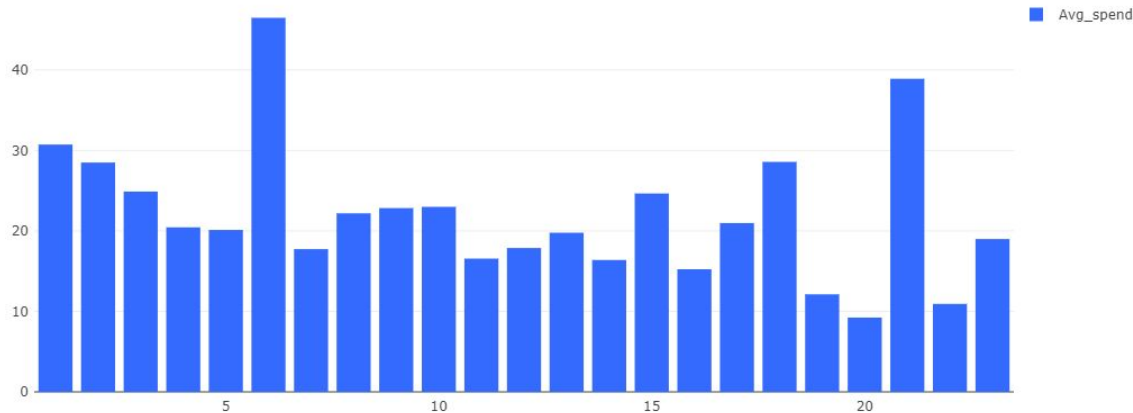


- Repeat users are growing week over week to make up for drop in new customer growth
- One area we do have success is that our repeat users are loyal
- Next slide will explore delay in order

week	total_users	new_users	repeat_users
39	442	442	0
40	985	868	117
41	976	696	280
42	1,070	666	404
43	943	520	423

Average Order Size on repeat orders

- Order size generally decreasing with repeat orders
- Take the larger numbers with grain of salt based on small data



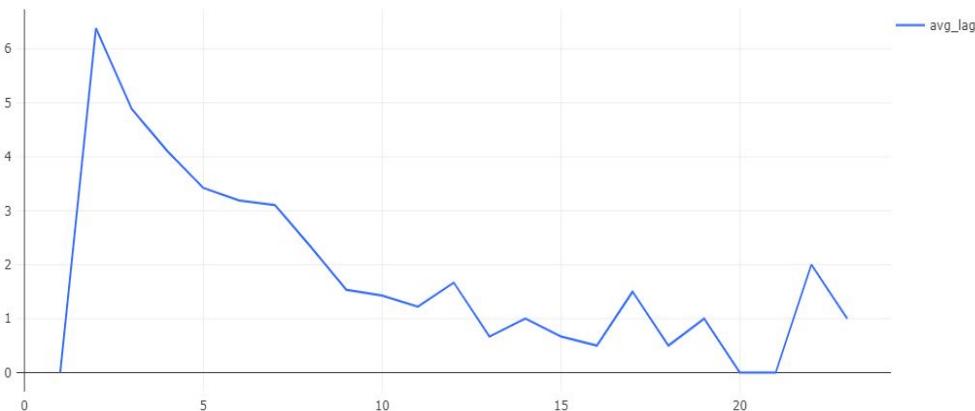
delivery_num	Avg_spend	number_of_times
1	30.73	2,568
2	28.49	724
3	24.89	303
4	20.44	154
5	20.12	84
6	46.47	48
7	17.73	34
8	22.18	19
9	22.83	13
10	22.99	10
11	16.56	8
12	17.88	3
13	19.77	2
14	16.38	2
15	24.65	2
16	15.24	2
17	20.98	2
18	28.58	1
19	12.12	1



Lag Analysis and Value



- Showing again our frequent users (more than one order in 7 day span) is growing
- We are also seeing an increase in users coming back to use the platform
- Our top of funnel is slowest with lack of new users onto platform
- Our lag time is also decreasing with each order - habits are being formed



period	new_users	frequent_users	infrequent_users	average_spend
39	374	30	0	46.43
40	813	224	16	30.50
41	676	284	107	32.73
42	677	317	196	23.75
43	502	321	216	23.73

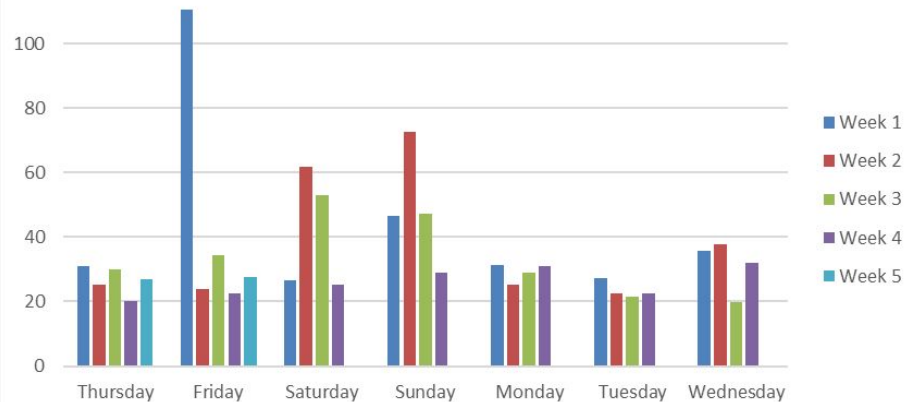
Merchants:



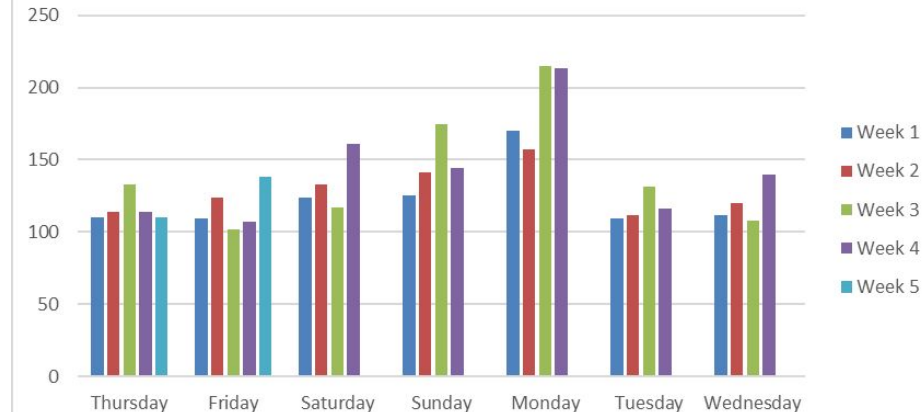
Average Order Value & Order Volume

- AOV trending down
- Volume is more consistent and increasing

Average Order Value By Week



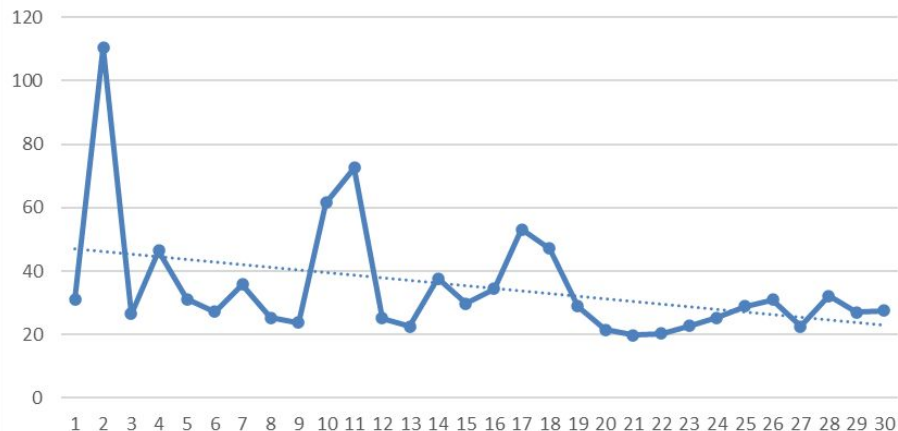
Order Volume By Week



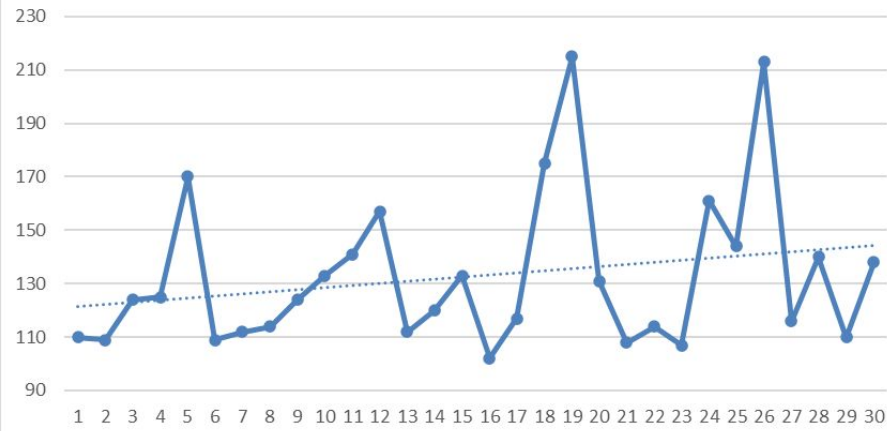
Average Order Value & Order Volume



Average Order Value by Day



Order Volume by Day



Average Order Value & Order Volume



-- Total Daily Revenue:

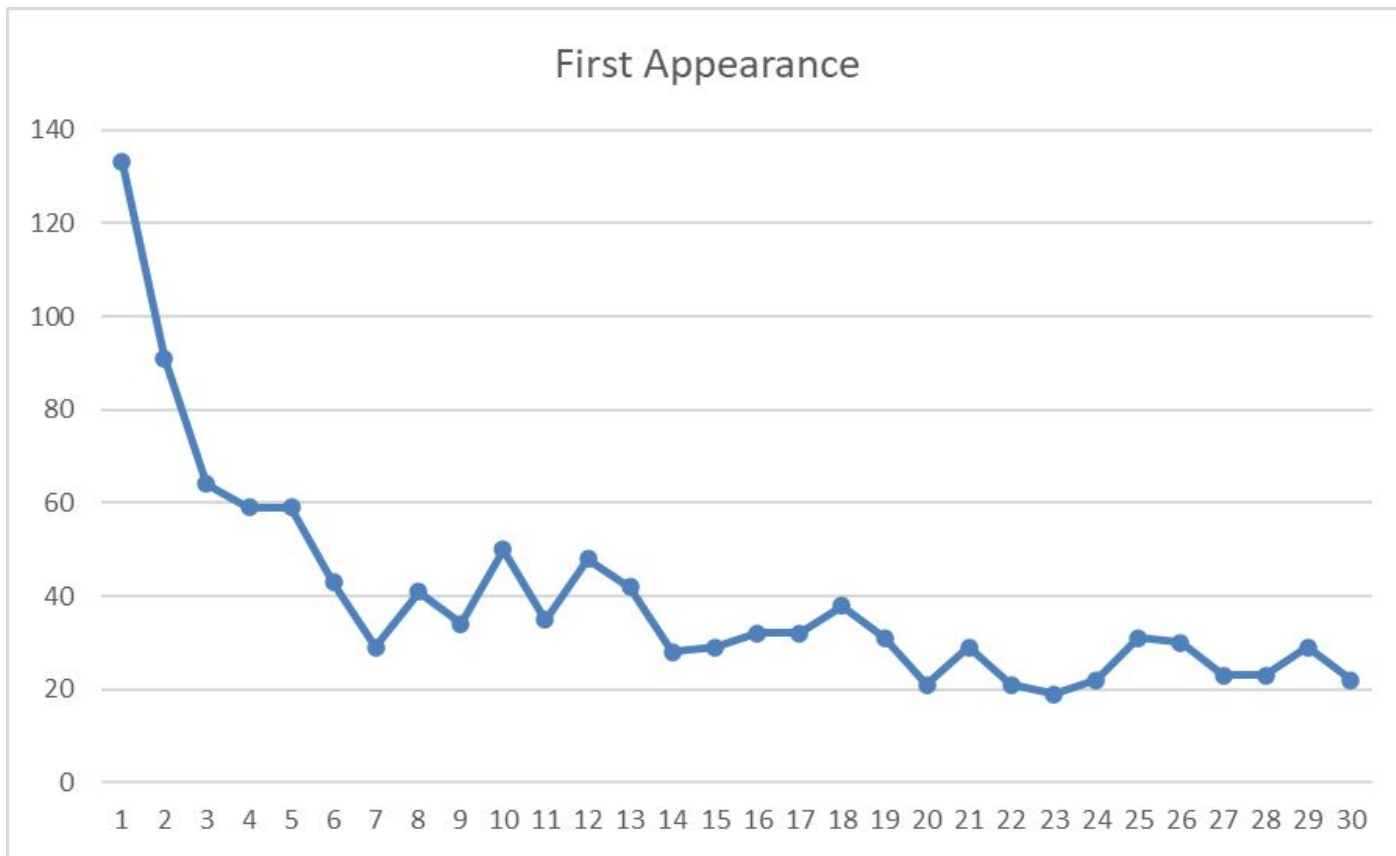
```
SELECT
    EXTRACT(day FROM
when_the_delivery_started) as
day_num,
    SUM(Total) AS SumOfTotal
FROM Skillful_Data.Project_Data
GROUP BY 1
ORDER BY 1
```

-- Average Order Value

```
SELECT
    EXTRACT(day FROM
when_the_delivery_started) as day_num,
    delivery_id,
    SUM(Total) AS Combined
FROM Skillful_Data.Project_Data
GROUP BY day_num, delivery_id
HAVING Combined > 0
ORDER BY day_num ASC, delivery_id ASC
```

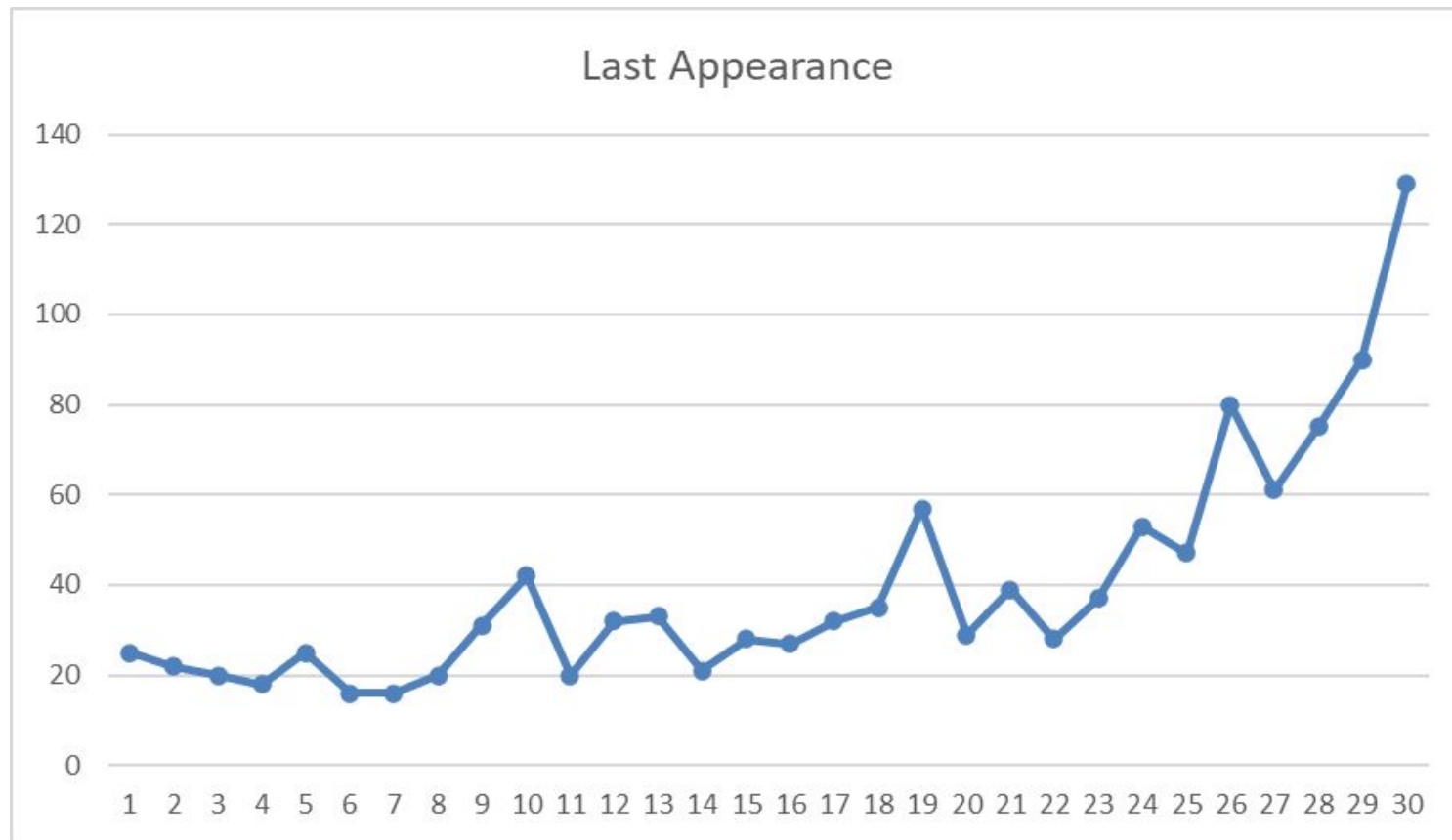
New Merchant Signups by Day

Note: 1188 Unique Merchants. Checking for duplicates by zone_ID, not by long/lat



Merchant Drop-off

Note: 653 Merchants (55%) haven't been ordered from in at least 7 days





New Merchant Signups by Day

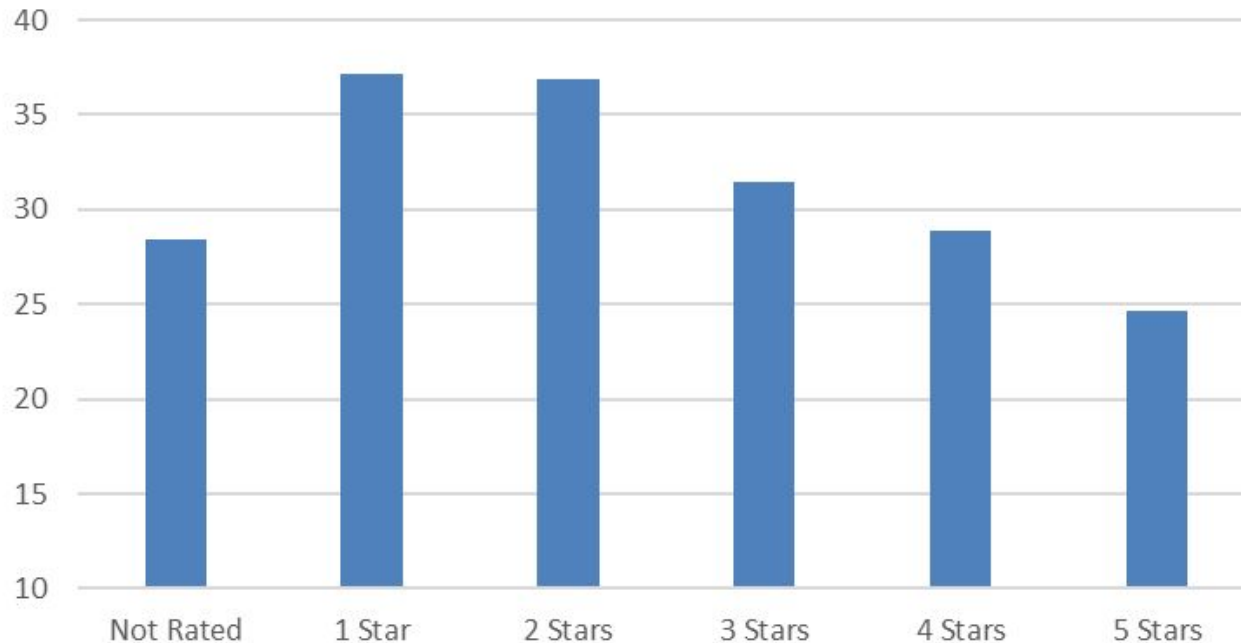
```
-- Group By Pickup
SELECT
    pickup_place,
    EXTRACT(day FROM
when_the_delivery_started) as
day_num,
    Pickup_Zone_ID,
    delivery_id,
    SUM(total) AS Combined
FROM Skillful_Data.Project_Data
GROUP BY pickup_place,
Pickup_Zone_ID, day_num, delivery_id
ORDER BY day_num ASC,
    pickup_place ASC,
    delivery_id ASC
```

Delivery Rating by Time-to-Make

Note: Time-to-make is from Delivery start to Courier leaving with order.
Removing Delivery Rating 0 stars, and removing time-to-make <5min



Average Time Taken per Ranking



Stars	Count
Not Rated	2809
1 Star	91
2 Stars	161
3 Stars	373
4 Stars	479
5 Stars	629
<5 min	672



Average Order Time by Activity

- Dividing Merchants into Active (Receiving Orders) and Inactive (No orders in 7 days or more)
- Average Order Time:
 - Inactive: **11.8 min**
 - Active **38.1 min**

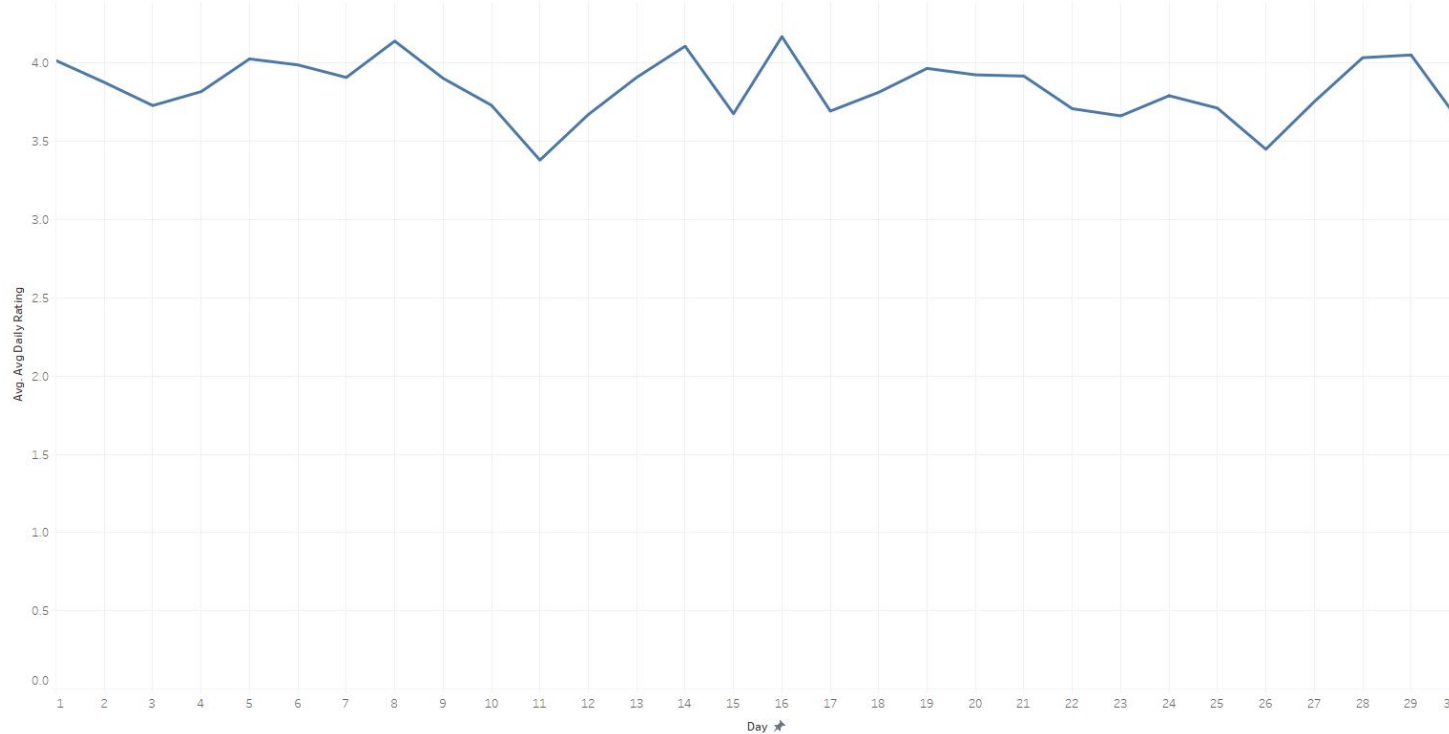
April 26th:

Couriers:

Daily Average Total Rating



Average Daily Rating



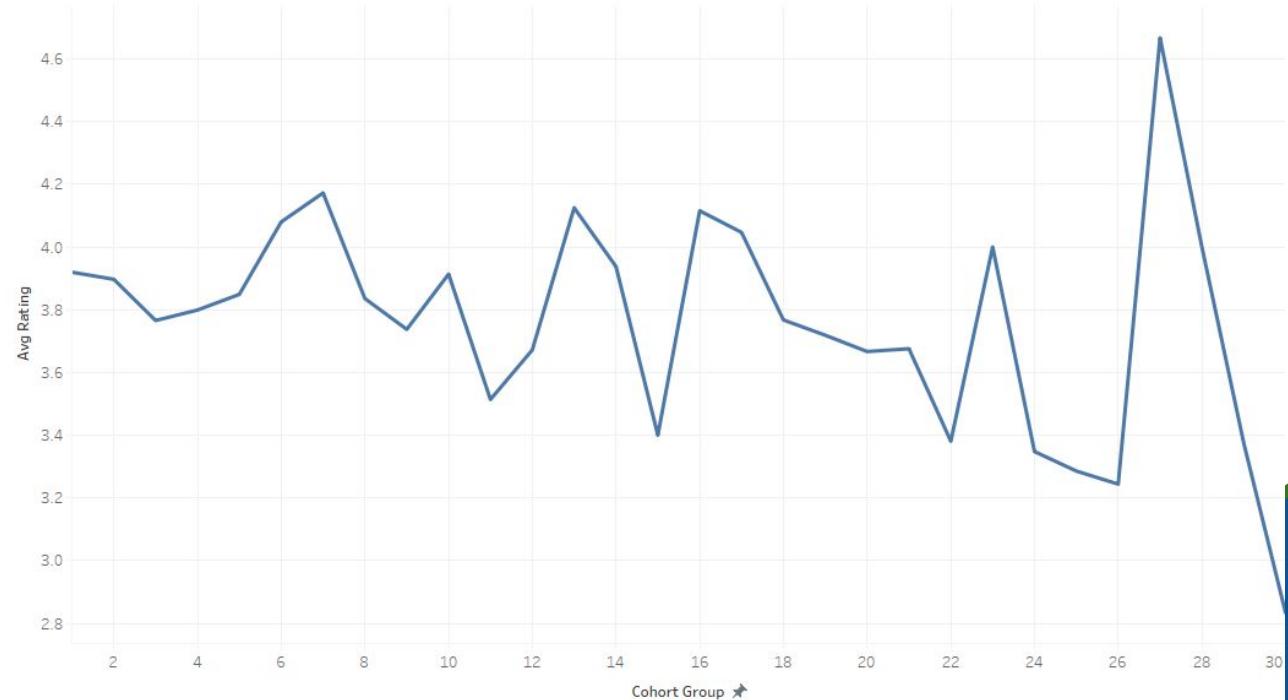
The trend of average of Avg Daily Rating for Day.

Daily Rating by Cohort Group (Day User First Ordered)



Avg Total Rating by Cohort Group

Seems to be decreasing



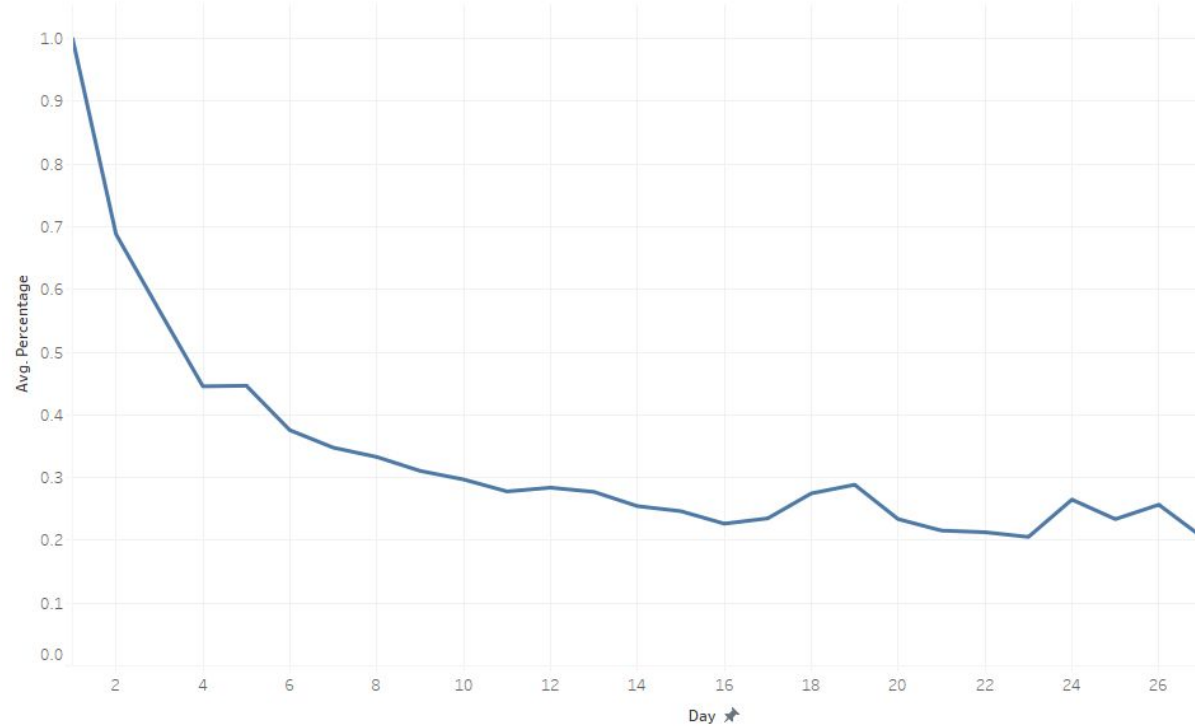
Cohort Group vs. Avg Rating.

Courier Retention



Decreasing to a steady state

Courier Retention



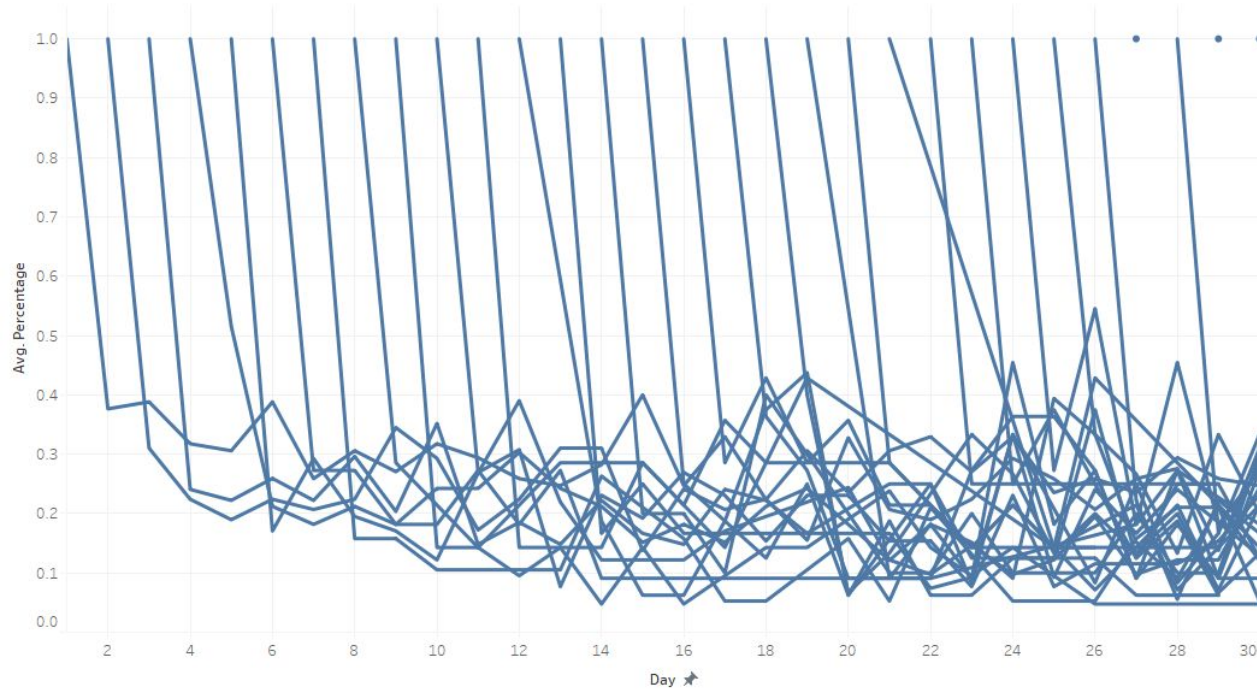
The trend of average of Percentage for Day.

Courier Retention by Cohort



Seem to behave similarly

Courier Retention by Cohort Group



The trend of average of Percentage for Day. Details are shown for Cohort Group.

Average Order to Pick-Up Time by Vehicle Type



vehicle_type	Avg_Order_to_PickUp	Num_Trips
bicycle	11.69	3,740
car	15.49	1,050
walker	13.92	234
van	14.88	69
scooter	15.28	64
truck	20.36	38
motorcycle	11.60	19

Bicycles seems to be the preferred vehicle type by couriers. Manhattan is densely populated and efficient by far

	borough	Total_Rating	AvgTimeWaiting
1	Brooklyn	1	15.83333
2	Brooklyn	2	35.75000
3	Brooklyn	3	22.07143
4	Brooklyn	4	13.66667
5	Brooklyn	5	16.10345
6	Manhattan	0	38.00000
7	Manhattan	1	25.49020
8	Manhattan	2	25.66929
9	Manhattan	3	21.56289
10	Manhattan	4	18.09426
11	Manhattan	5	15.29912

Courier Type	Avg. Time between Customer Order and Courier Pickup	Avg. Time Courier Waits at Merchant*	Avg. Time from Merchant to Customer Delivery	Average Total Time from Order Placement to Customer Delivery	# of Orders	
Bicycle	11.69	18.98	22.15	44.01	3,740	

Average Pick-Up to Delivery Time by Vehicle Type



vehicle_type	Avg_Pickup_to_Delivery	Num_Trips
bicycle	32.15	3,740
car	35.66	1,050
walker	33.06	234
van	32.95	69
scooter	31.00	64
truck	47.62	38
motorcycle	36.95	19

Same comment as previous slide

Average Wait Time at Restaurant by Vehicle Type



vehicle_type	Avg_Wait_At_Restaurant	Num_Trips
bicycle	18.98	3,740
car	18.70	1,050
walker	18.62	234
van	16.56	69
scooter	18.03	64
truck	22.29	38
motorcycle	23.15	19

Merchants by Borough



	borough	NumofMerchants
1	Brooklyn	81
2	Manhattan	837
3	Queens	1

Total Rating by Time at Merchant



How likely to never

Order again if below 4

	borough	Total_Rating	AvgTimeWaiting
1	Brooklyn	1	15.83333
2	Brooklyn	2	35.75000
3	Brooklyn	3	22.07143
4	Brooklyn	4	13.66667
5	Brooklyn	5	16.10345
6	Manhattan	0	38.00000
7	Manhattan	1	25.49020
8	Manhattan	2	25.66929
9	Manhattan	3	21.56289
10	Manhattan	4	18.09426
11	Manhattan	5	15.29912

Unique Customer Analysis



Somewhat more complicated, need to discuss

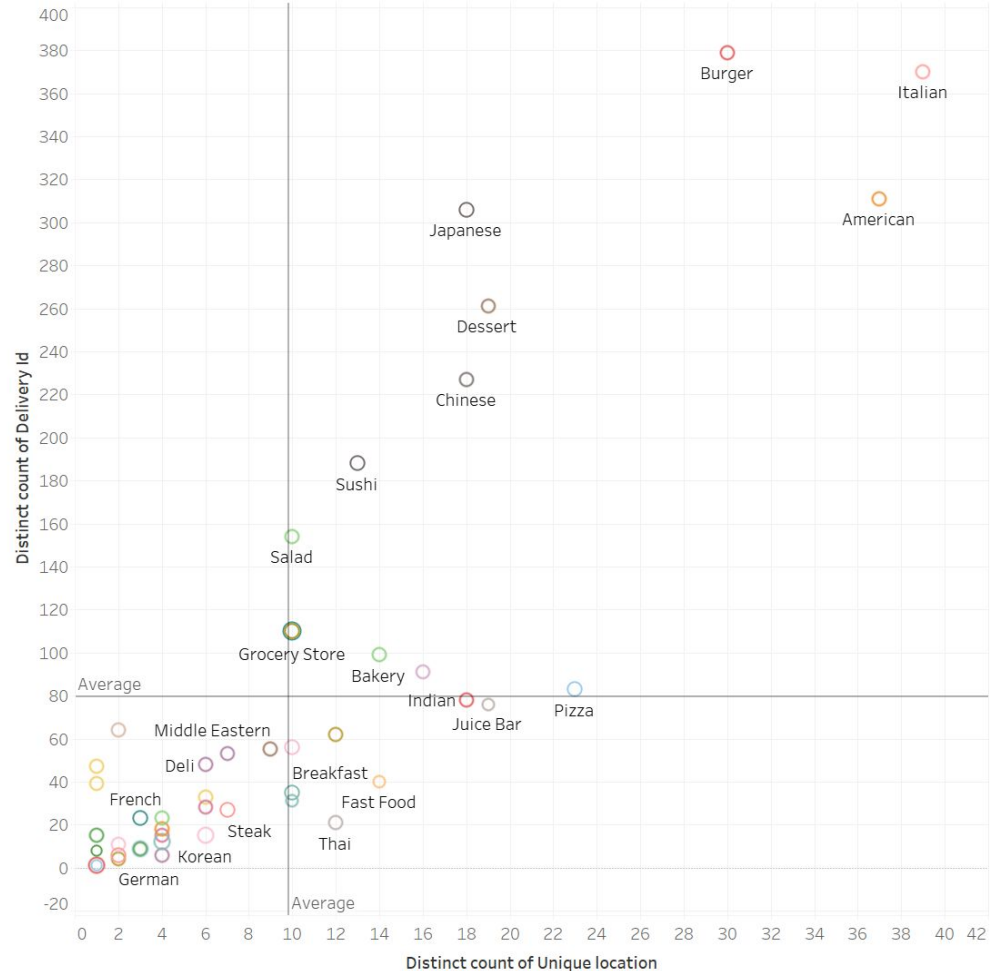
Smaller subcategories for store types

Merchants:

Types of Cuisines



Place Categories (# of Deliveries by # of Merchants)



Dealing With Outliers



Postmates Liquor Store has disproportionately high Average Order Value (\$1049), sustained over 39 orders.

Excluded this store

delivery_id	item_name	item_category_name	Total
1,273,969	Jameson Blended Irish Whiskey (750ml) ←	Whiskey	287.09
1,274,627	Don Julio Reposado (750ml)	Tequila	93.51
1,279,862	Clos de Los Siete Malbec Blend	Malbec	1,428.06
1,279,862	Olga Raffault Rose	Rose	494.52
1,282,324	Anne Pichon Sauvage	Syrah/Shiraz	6,692.60
1,293,159	Tito's Handmade Vodka 80 (750ml)	Vodka	452.21
1,295,795	Smirnoff 80 Vodka (1L)	Vodka	462.89

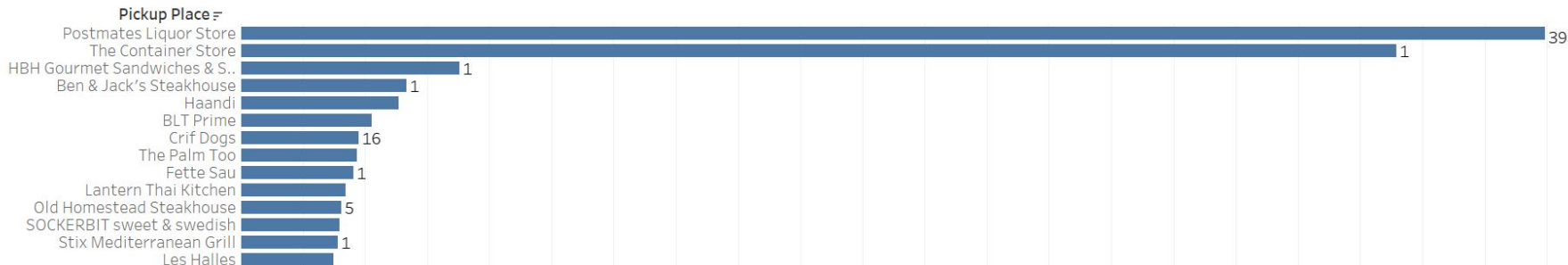


Jameson Irish Whiskey

750 ml bottle

\$35.45 ←

AOV by Merchant



Dealing With Zeros

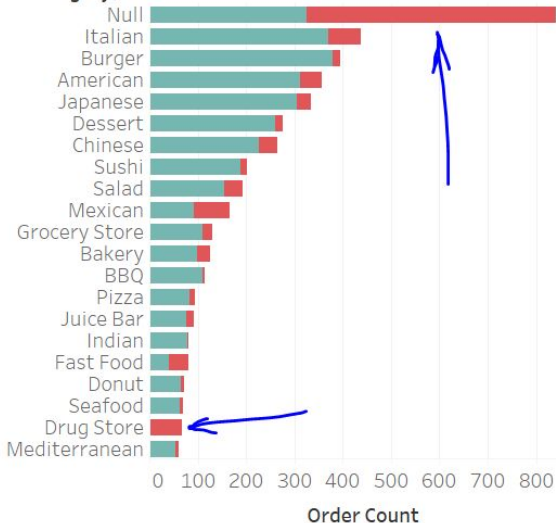


Zeroes Dont equal Cancellations

Zeroes concentrated with a few Merchants that have all orders with Totals = 0

Completed Orders Vs Zero Orders

Place Category =

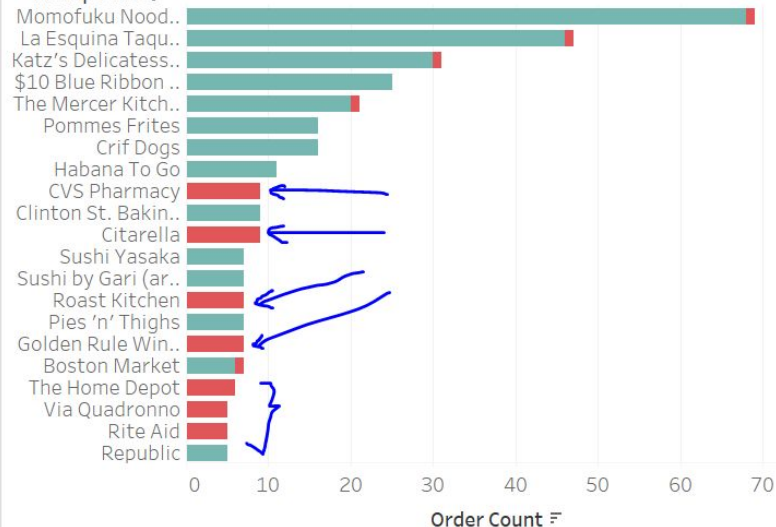


IsZero

Zeroes
Completed

Merchants with NULL place_category

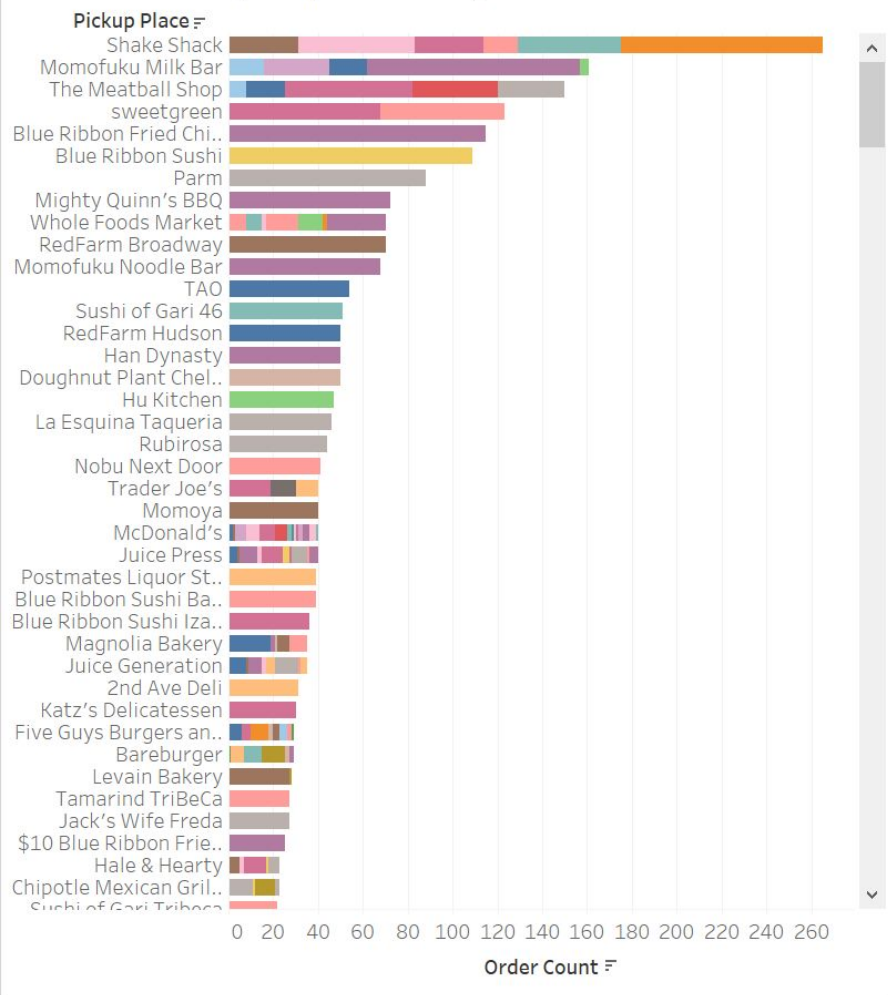
Pickup Place =

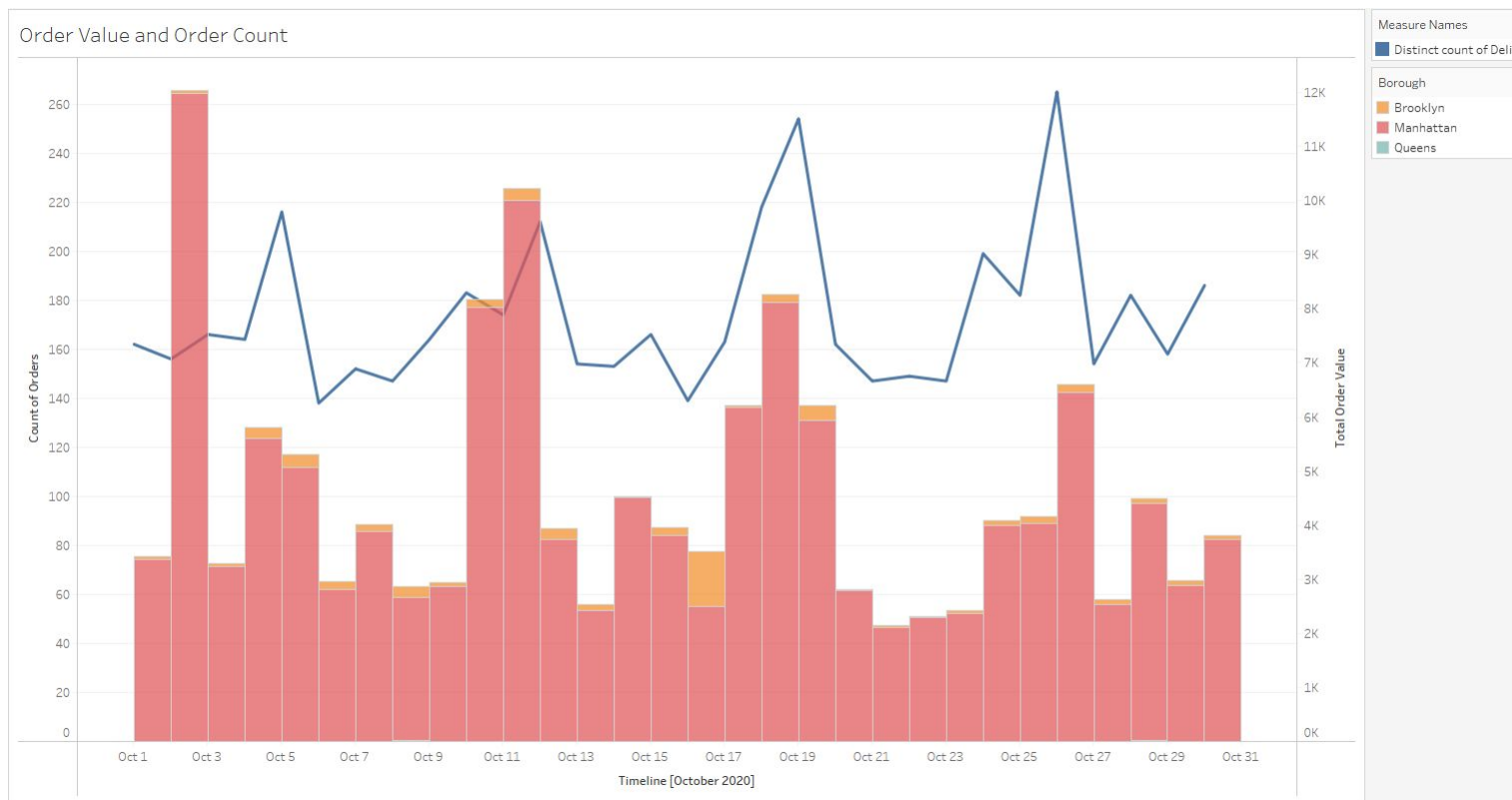


Order Volume

May benefit from focusing on chains

Order Volume (Unique Names)





- Our order count is relatively stable throughout the month (spikes on weekends)
- Value of orders are steadily decreasing throughout the month (orders are getting smaller)
- Minimal to no orders in Brooklyn or Queens