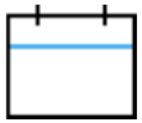
Analysis Scope and Parameters



Analysis Period

1 month of data

KPI

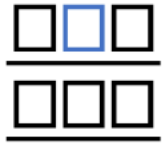
Average Delivery time

Repeatability

Avg order value ($)

Order per customer

No. of orders per driver



Stakeholders

Customers

Restaurants

Drivers

Summary

Descriptive Analysis

- High delay time between order placed by customer and order received by restaurant
- Higher delivery time in San Jose leading to lower repeatability even with higher discounts
- New restaurant should be onboarded in San Jose

Opportunity to Optimize Supply and Demand

- Shortage of Driver's supply during peak hours (4pm to 7pm)
- Avg delivery time increase by 10% during peak hours
- Orders per driver increase to 12.71 during peak hours

Clustering identifies Star and potential high growth Customers

- Star customers (High repeatability, no discounts)
- New customers (Low repeatability, order with high discount)
- Potential high growth customers (No discount, medium repeatability)
- Potential churn customers (No repeatability, medium discount)

KPIs

Average Delivery time

- Time from order placed by customer to order delivered

Repeatability

- Frequency of orders placed by customer in one month
- Customers with frequency >= 4 are considered repeatable

Avg order value ($)

- Total order amount/count of orders per customer

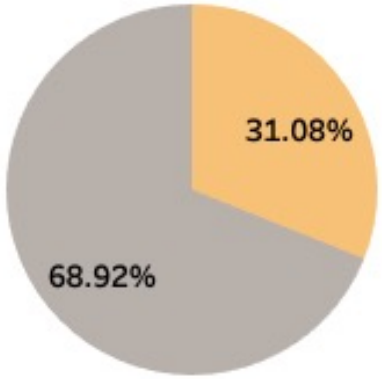
Order per customer

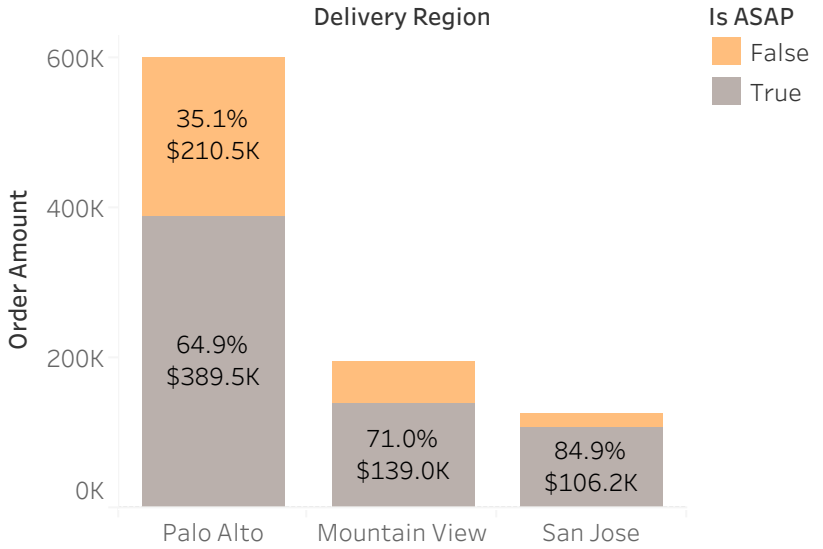
- Total order count/total distinct customers

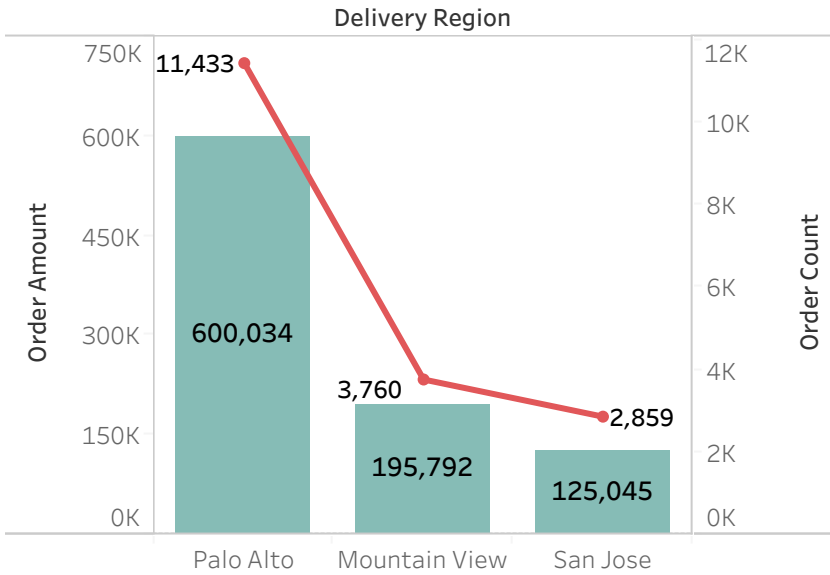
No. of orders per driver

- Total order count/total distinct drivers

Demand by region and delivery type





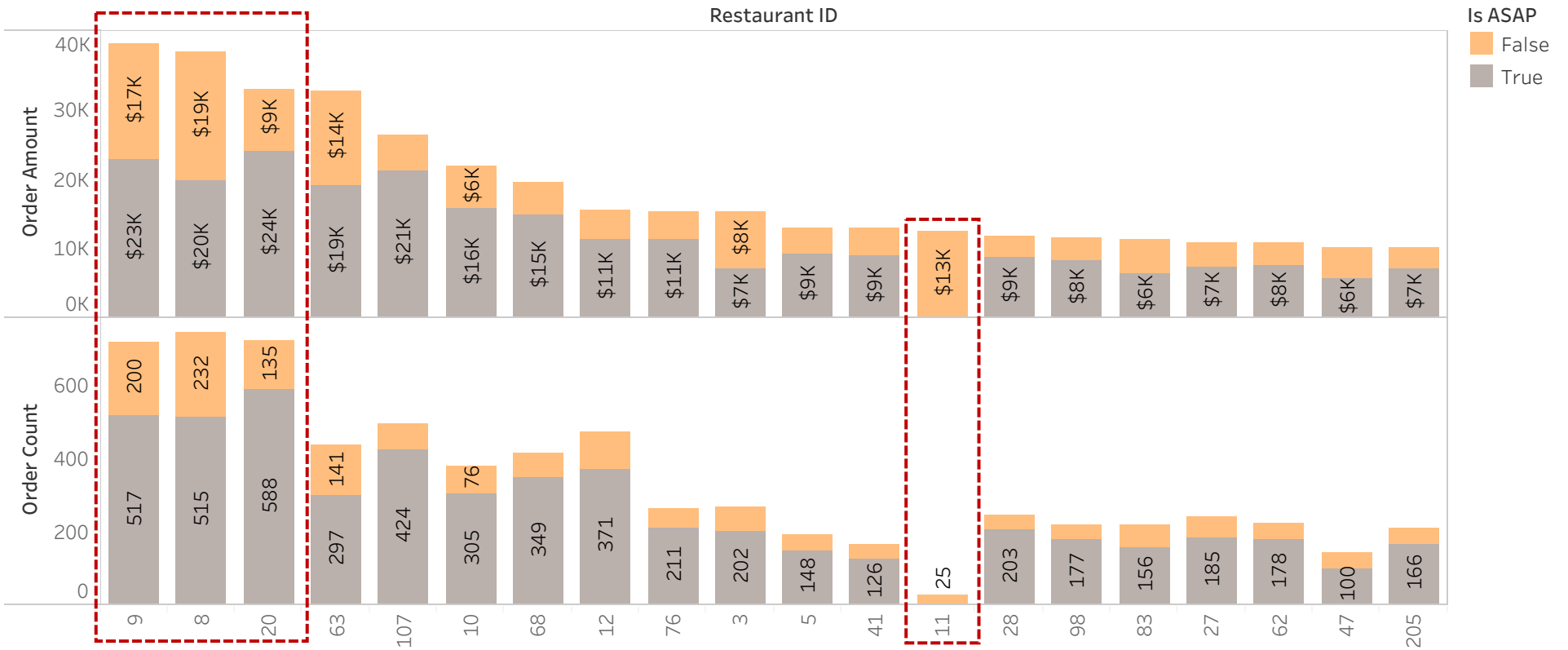


- 31% orders ($ amount) are asap orders
- 69% orders are scheduled (non-asap)

- San Jose has highest ratio of asap orders – 85% wrt to 69% region average
- Asap orders are higher than non-asap orders, with San Jose being highest at 85%.

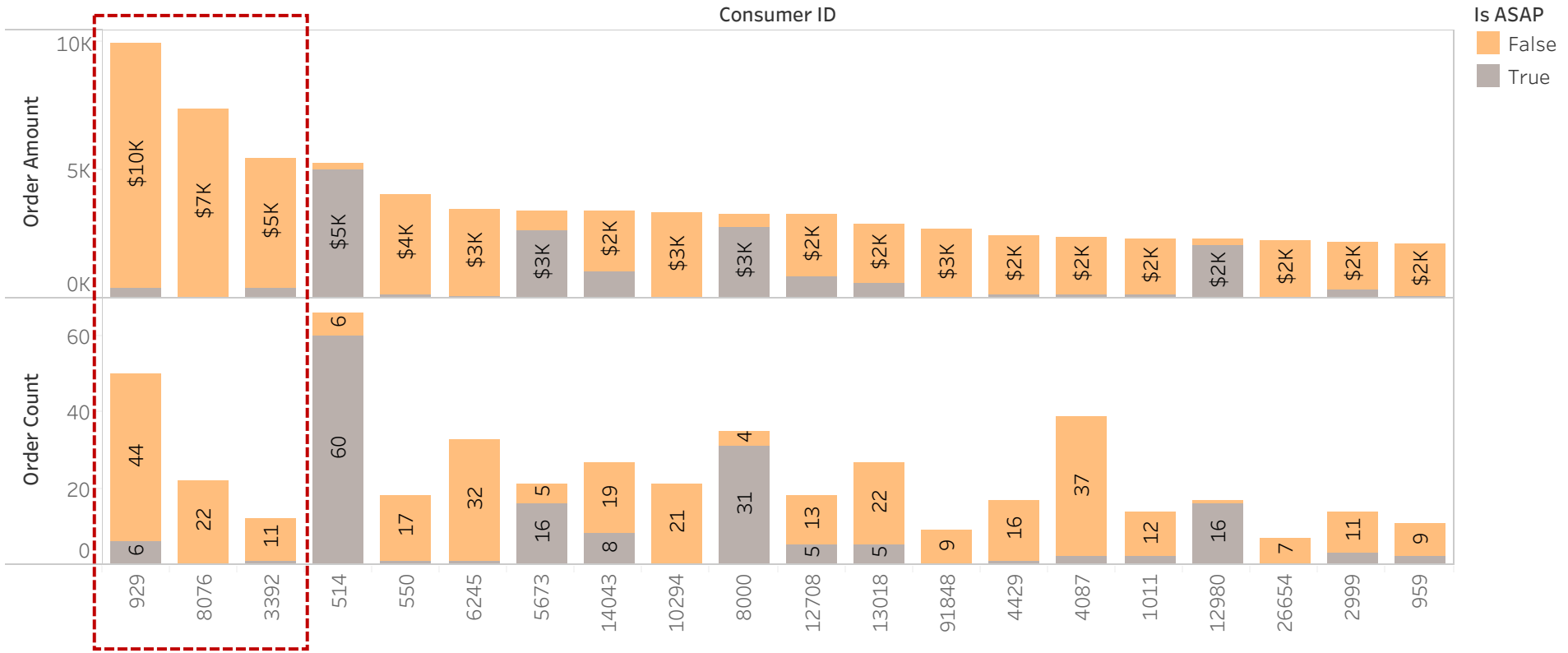
- Palo Alto has highest order ($ value) as well as order count
- More than 50% or region demand is coming from Palo Alto

Top 20 Merchants by Order Value & Order Count



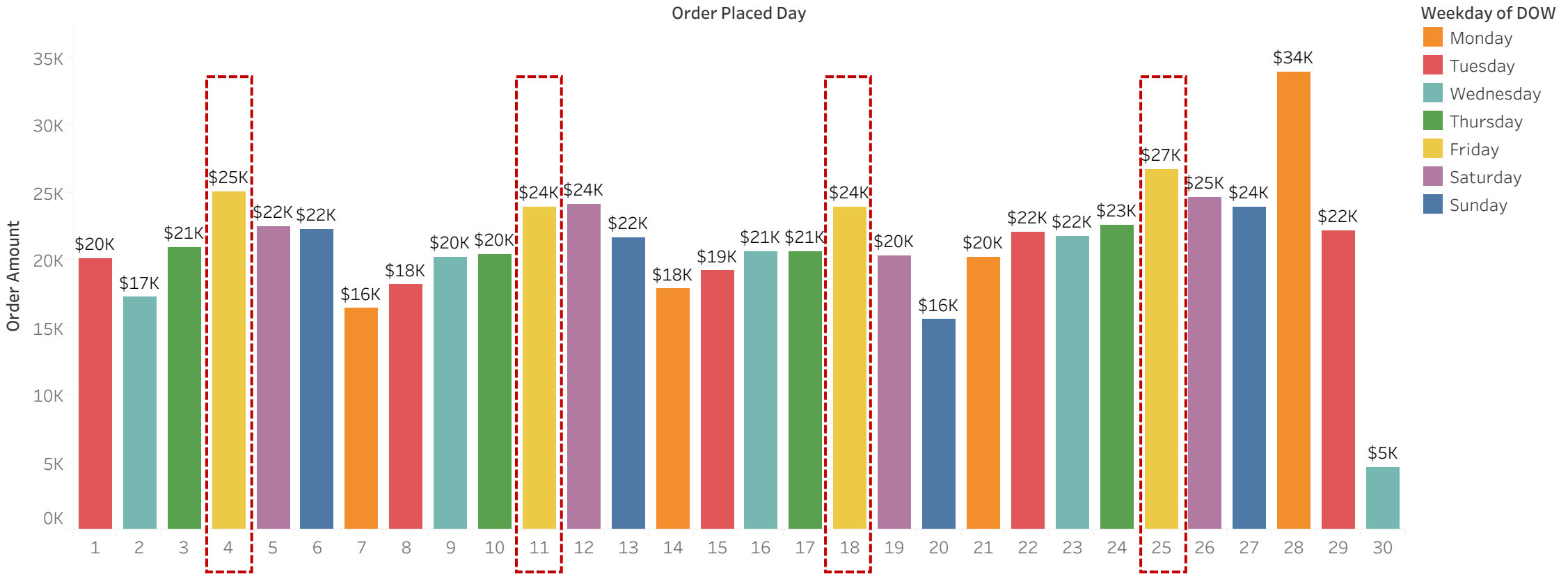
- Above is the chart for Top-20 restaurants based on order amount.
- Restaurant number 11 is among the top ones, but only caters non-asap orders, potential to be among top-3 by also considering asap orders as it has $13k in non-asap which is third highest.

Top 20 Customers by Order Value & Order Count



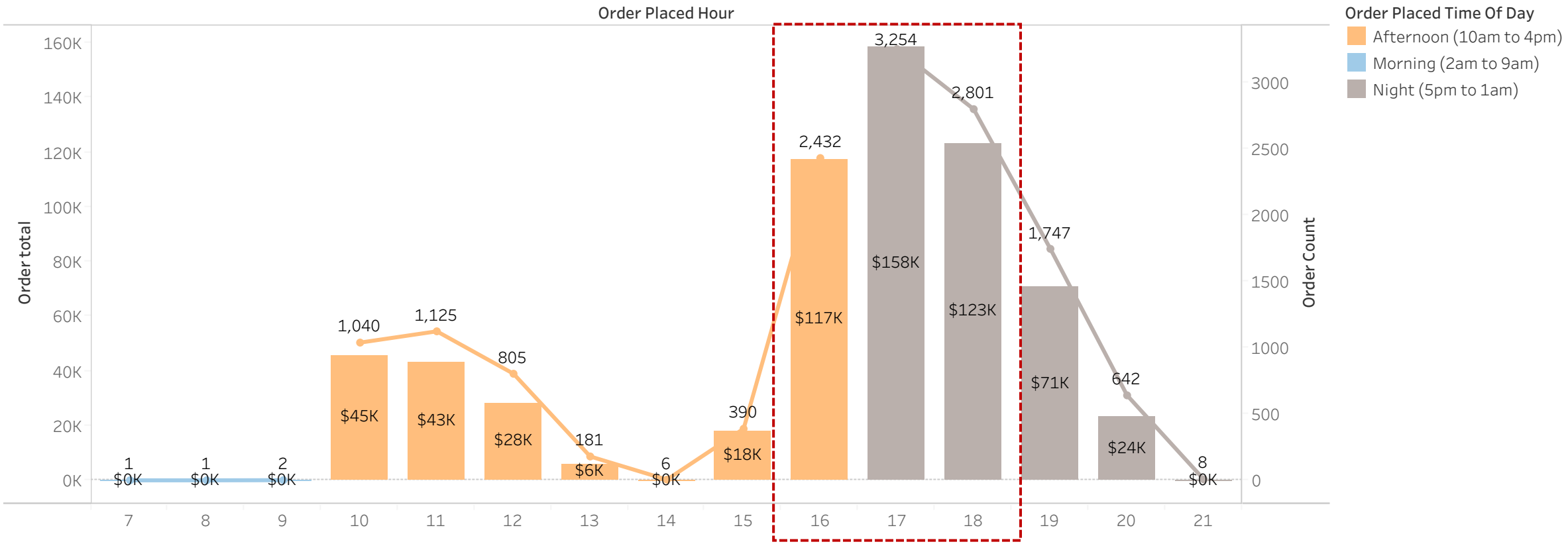
Top customers with highest order amount have non-asap orders. Looks like these are corporate orders or catering orders.

Day of Week Seasonality: High demand during weekend



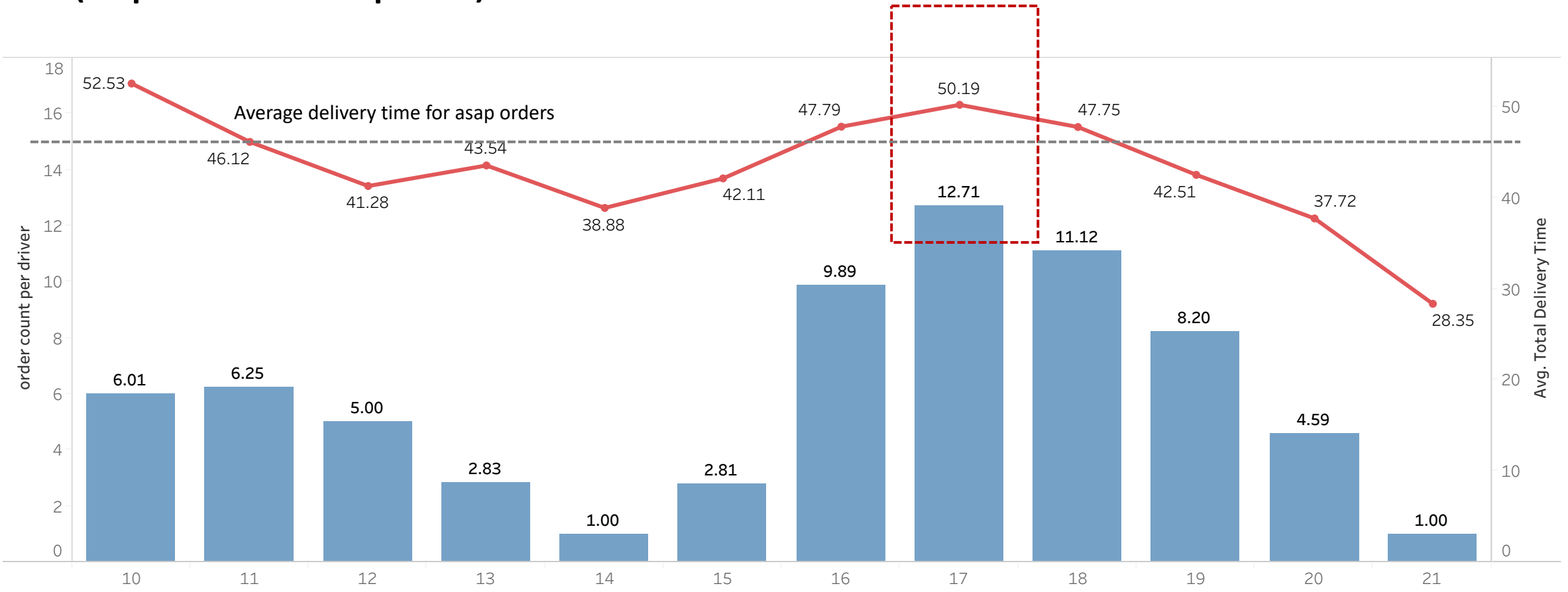
Order amount shows seasonality with Day of Week with higher trends in Yellow (assumed it to be Friday) and lower trends on Orange (Monday).

Hour of Day Seasonality : Peak hours (4 pm to 7 pm)



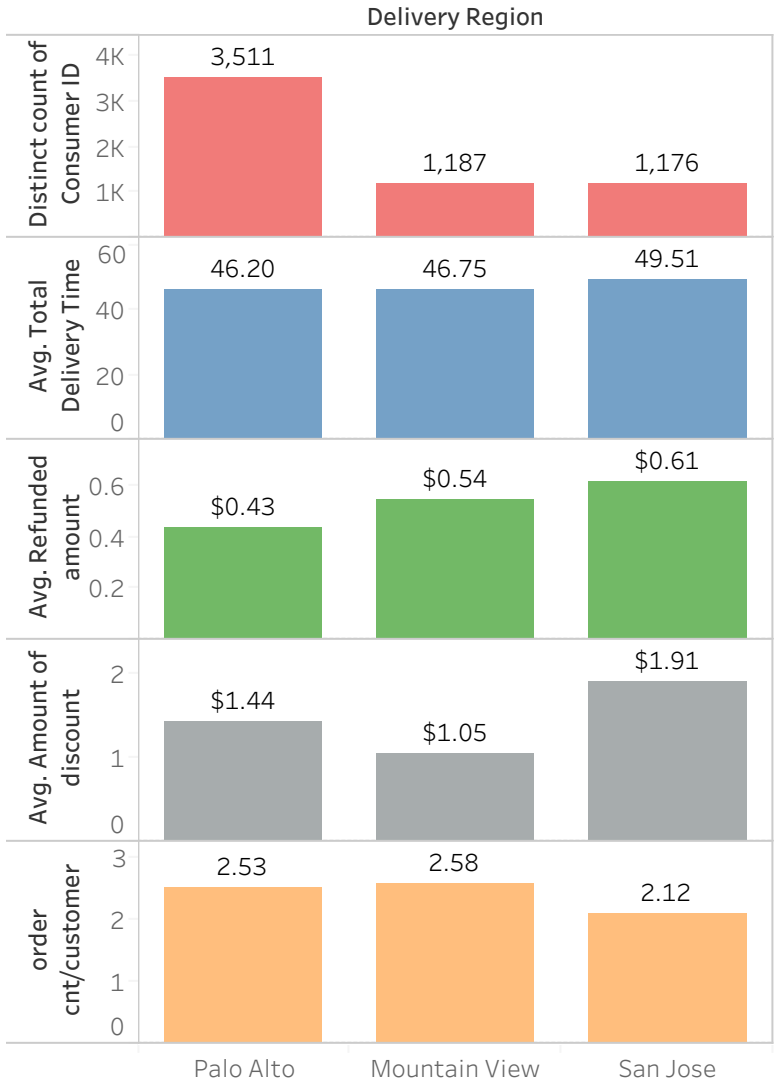
- Above analysis is for ASAP orders
- During peak hours, total order value ($) as well as order count is higher.

Shortage of Driver's supply during peak hours (4pm to 7pm)



- Avg delivery time increase by 10% during peak hours
- Orders per driver increase to 12.71 during peak hours

Higher delivery time in San Jose leading to lower repeatability even with higher discounts

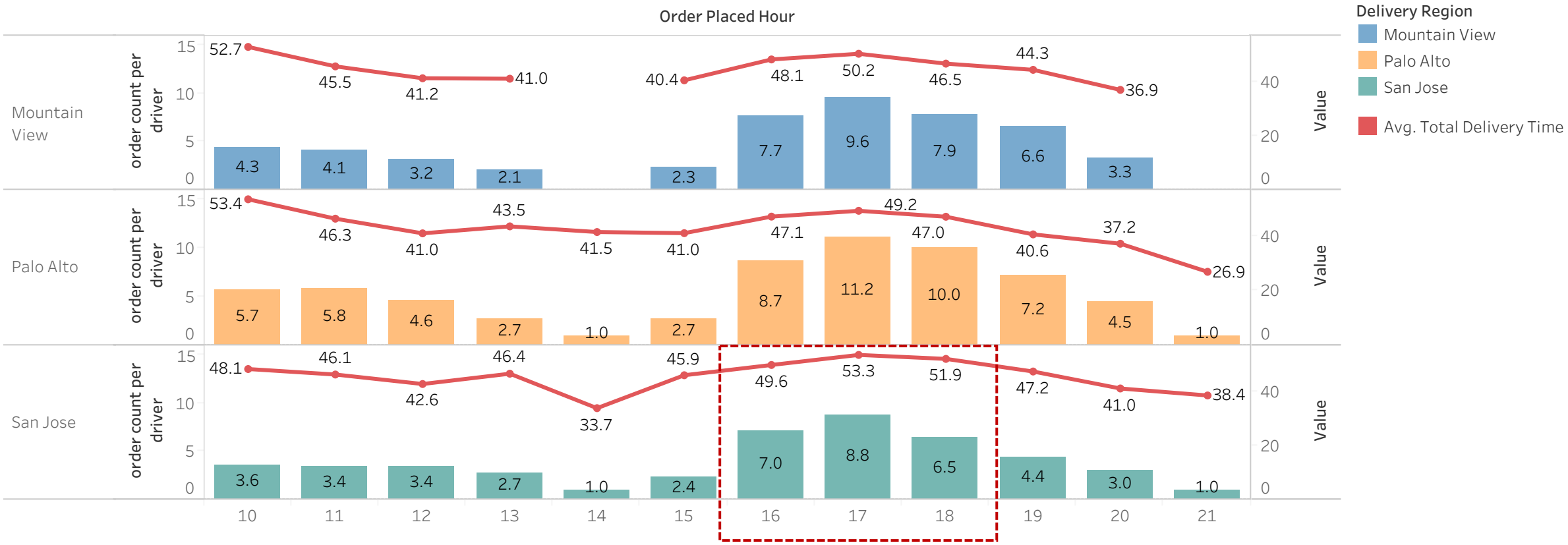


- San Jose & Mountain View (MV) have same customer base (~1200)
- San Jose has highest avg. delivery time for asap orders
- ~6.5% more delivery time for San Jose than MV
- San Jose has highest avg refund amount
- San Jose has highest avg discount
- San Jose has lowest orders per customer

Hypothesis- higher average delivery time in San Jose causing:

- Lower orders/customer
- More avg refund
- More avg discount

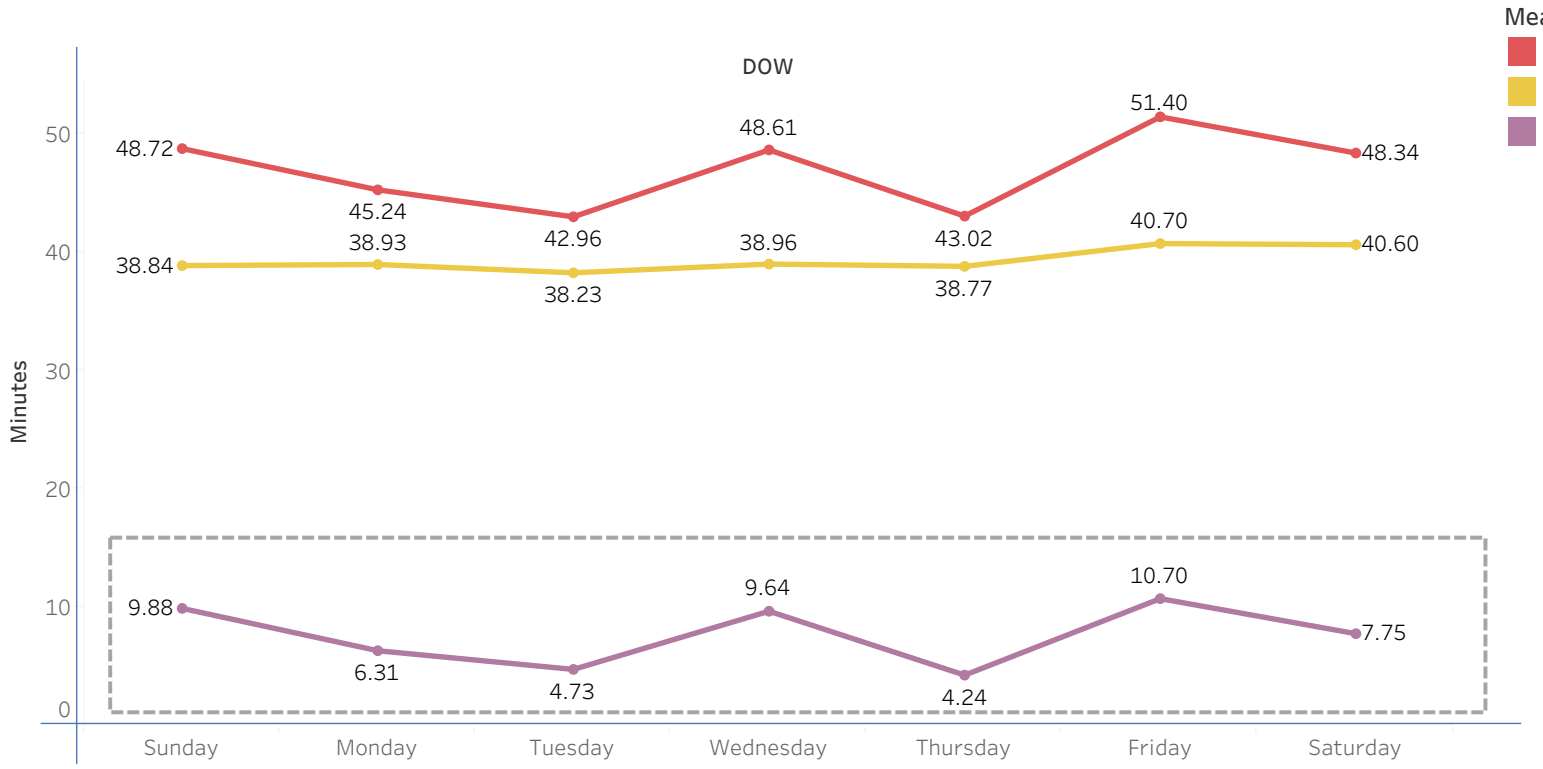
New restaurants should be onboarded in San Jose

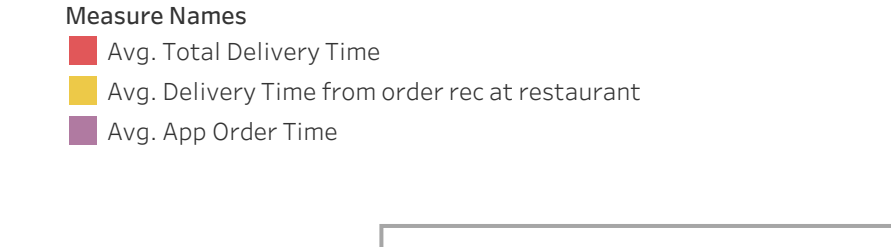


Hypothesis - Restaurants are situated far from San Jose causing higher delivery time:

- Avg total delivery time for San Jose is 53.3 during peak hour while order/driver is 8.8. However, both Palo Alto & Mountain View have much better delivery time for a higher order/driver rate. It implies driver have to drive longer for San Jose delivery.
- Recommendation to onboard new restaurants in the region.

High Order processing time by app





- High app processing time and variability leading to overall variability in avg delivery time
- App processing time should be consistent and can be optimized to improve overall delivery time

Customer segmentation: K-Means Clustering

Cluster 3 – Star customers (High repeatability, no discounts)

Cluster 2 – New customers (Low repeatability, order with high discount)

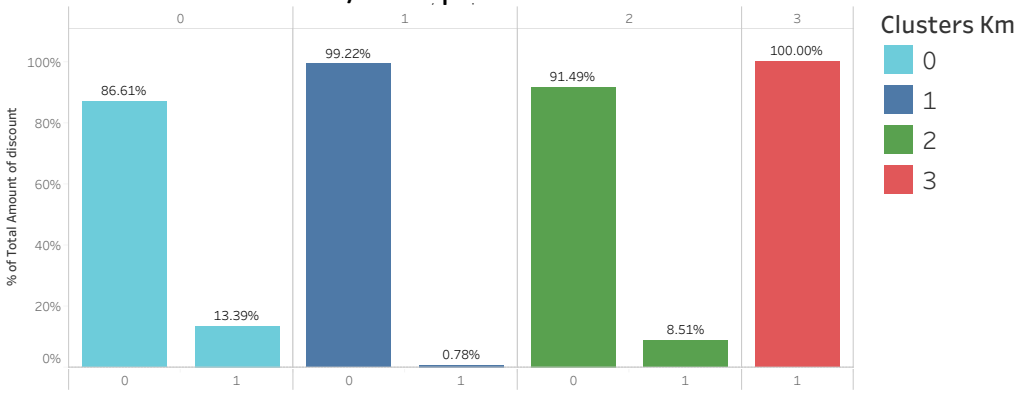
Cluster 0 - Potential high growth customers (No discount, medium repeatability)

Cluster 1 – Potential churn customers (No repeatability, medium discount)

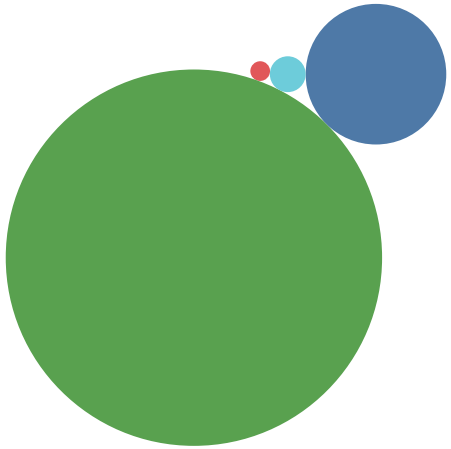
Repeatability is customer loyalty to the platform using frequency of orders place in a month

Understanding our Customers

Customer clusters/ Is Repeat customers



Average amount of discount per cluster



Cluster 0: $ 0.4
Cluster 1: $ 6.2
Cluster 2: $ 44.2
Cluster 3: $ 0.1

Cluster 0 – Customers have a repeatability of 13.4% without any discount. These are high potential customers to be converted to star customers. Personalized notifications/emails as reminders should be sent to these customers.

Cluster 1 – Customers are on the verge of churn. Even with medium discount, there is no repeatability. We can run A/B test to quantify the impact of discount.

Cluster 2 – New customers with high discount offered to them (~$44). 8.5% got converted to repeated customers. Our target is remaining 91%.

Cluster 3 – Customers have 4 or more orders in a month without any discount. These customers are loyal and very important to retain and hence should be closely monitored.

** Repeat customers are those who ordered more than 4 times in a month

Next Steps & Recommendations

Improvement in delivery time

- Reduction in order processing time
- Incentives to drivers during peak hours and peak days
- Onboard new restaurants in San Jose

Customer retention & growth

- Closely monitor star customers (red cluster) as they are loyal to the platform
- Send personalized notifications/emails & targeted coupons to cyan & green cluster customers as they are high potential growth customers
- Run A/B testing experiment to quantify the impact of discount for blue customers as they are likely to churn

Additional Data for further improvement

- Forecasting will help us predict the customers demand and drivers supply to better optimize. More historical data required for this analysis
- Geographical data like – restaurant location, customer location, etc. will further help us analyze & optimize the delivery time

Thank You!