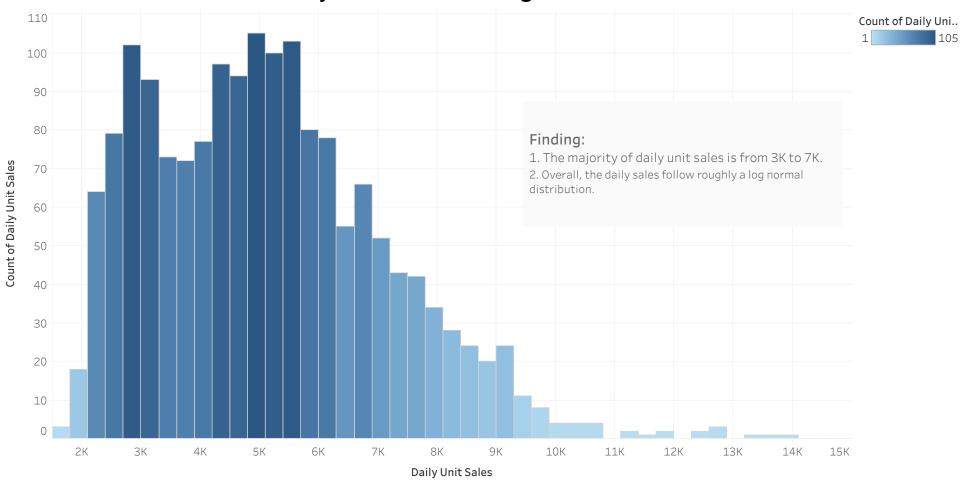
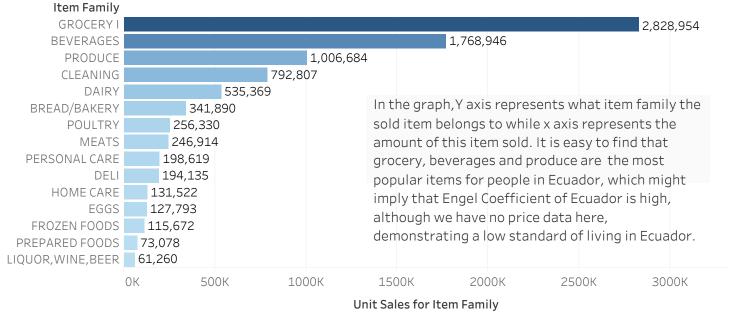
Daily Unit Sales Histogram

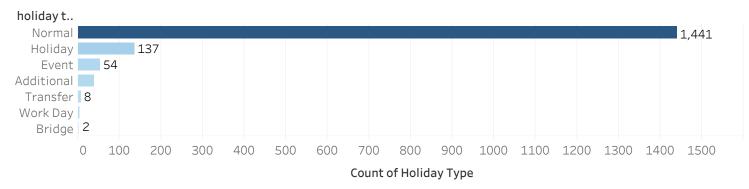


The plot shows count of Daily Unit Sales. Darker color represents higher amounts of count.

Unit Sales of Each Item Family



Frequency of Holiday Type



family

61,260 3M

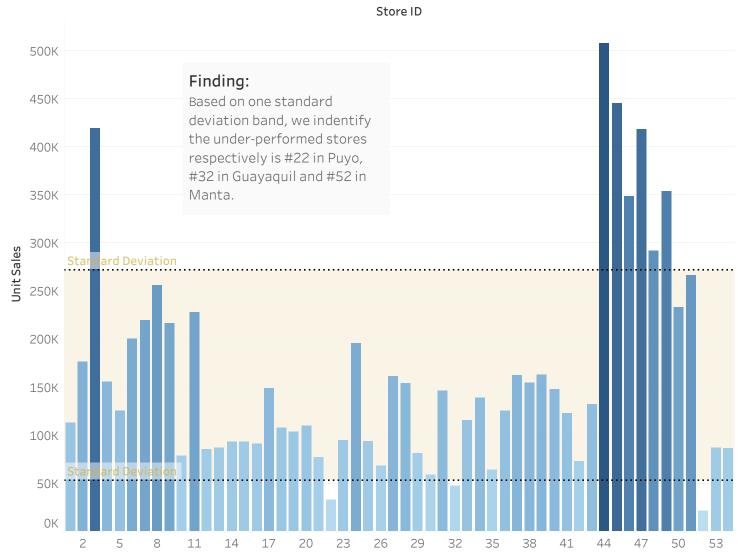
Highlight Item Family No items highlighted

Count of Holiday Ty..

1,320 855,154







The diagram shows the Sum of Unit Sales for each Store ID and darker blue represents higher Sum of Unit Sales. Based on one standard deviation band, we indentify the under-performed stores respectively is #22 in Puyo, #32 in Guayaquil and #52 in Manta.

Unit Sales by City in Ecuador

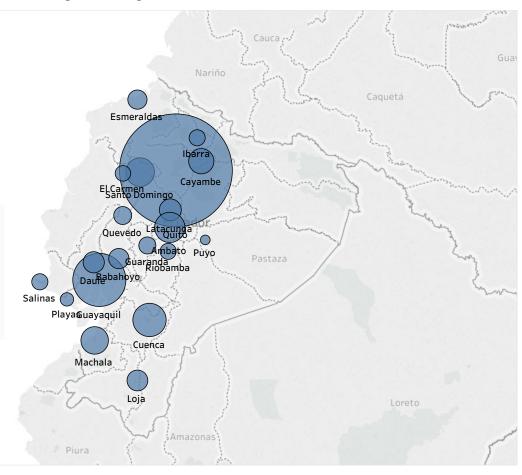
Findings

- 1. Stores allocates more in central vertical line of the country.
- 2. The top sales city are way over rest of the cities by at lease 4 times.

Why Circle Marks?

According to the gramma of graphics, the area is better than color density when showing numeric value. Therefore, to show the overall unit sale number in each city, we use circle size not colored area.

In addition, the city name is clearly labeled and the circle itself is transparent, so it is still comparable despite of the overlaps.



City Unit Sale

33,554 1,000,000

2,000,000 3,000,000 4,000,000

4,565,494

Each Cricle here is a city with stores, and the size of the circle indicate the overall unit sales from 2013 to 2017.

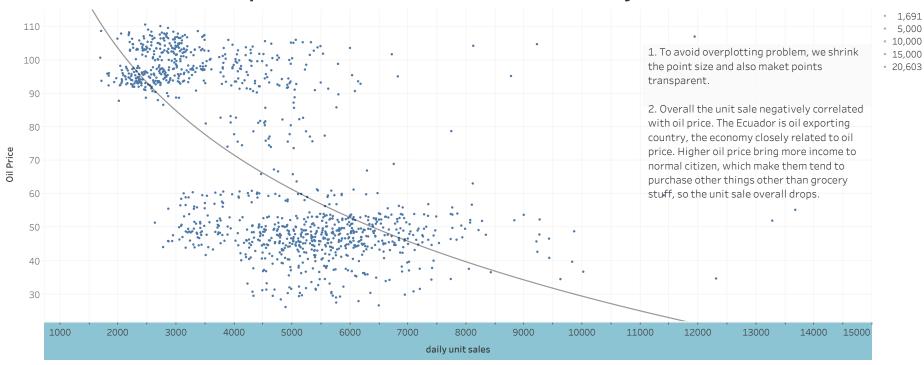
Guayas State Stores' Performance

Holiday	Holiday	Normal	Normal
Libertad	Playas	Libertad	Playas
Holiday Daule	Holiday Guayaquil	Normal Normal Guayaquil	

Avg. Daily Unit Sal..
5,019 6,589

The diagram uses two category variables: Holiday Type and City, showing the difference of average of Daily Unit Sales between Holiday and Normal Day among 4 Cities in Guayas State. Color and Size show average of Daily Unit Sales. Big size and darker color represent higher average of Daily Unit Sales. The Daily Unit Sales during Holiday are obviously larger than Normal Day's in each city

Relationship Between Oil Price and Daily Unit Sales



Each point in the chart indicates the total unit sale over Ecuador (X-axis) and oil price (Y-axis) in a specific day. The cruve line here is the fitted trend of the relationship between these 2 variables.