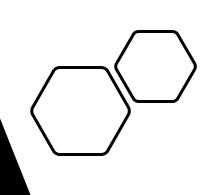
# Do Food Outlets cluster?



### Outline







**METHODS** 







**CONCLUSION** 



## Where to put your new restaurant

- Do you put your new restaurant near to similar restaurants or in a separate Borough?
- This study into food outlets aims to determine if food outlets cluster

### Methods



Two cities were studied

Toronto

New York



Food outlets were obtained from FourSquare within each Borough



Food outlets were clustered based on their classification



Clusters were plotted against location





### Results



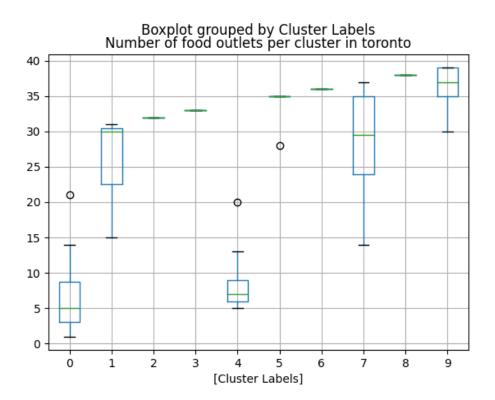
The less central locations of the city show variability in which cluster of food outlets they have

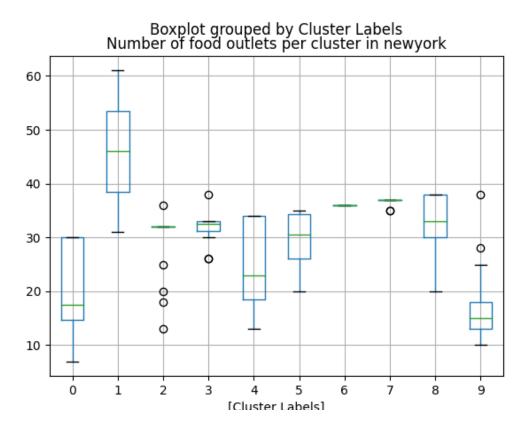


In New York very few adjacent boroughs have the same cluster of food outlets.

### Number of food outlets per cluster

 Box plots of Number of food outlets show most clusters had similar number of food outlets in New York. But Toronto showed differences between the clusters







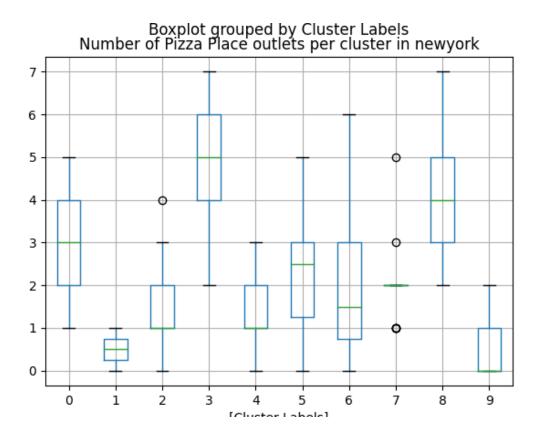
## But does this affect the most popular food outlets?

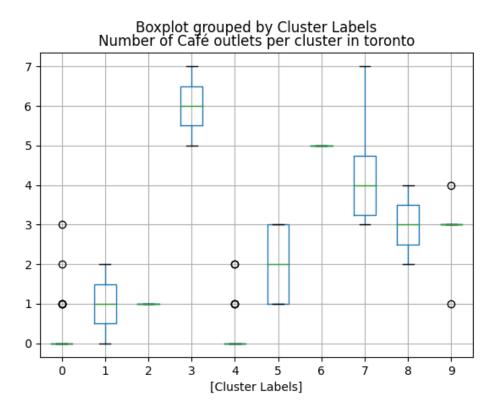
Some of the most popular food outlets appear top in more than one cluster

Cluster Labels	Most Popular Outlet in New York	Most Popular Outlet in Toronto
0	Pizza Place	Pizza Place
1	Korean Restaurant	Restaurant
2	Italian Restaurant	Greek Restaurant
3	Pizza Place	Café
4	Chinese Restaurant	Bakery
5	Deli / Bodega	Japanese Restaurant
6	Italian Restaurant	Café
7	Mexican Restaurant	Café
8	Pizza Place	Café
9	Deli / Bodega	Pizza Place

#### Where do Pizza places cluster

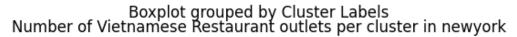
• The most common food outlets appear to be present in similar abouts in all clusters

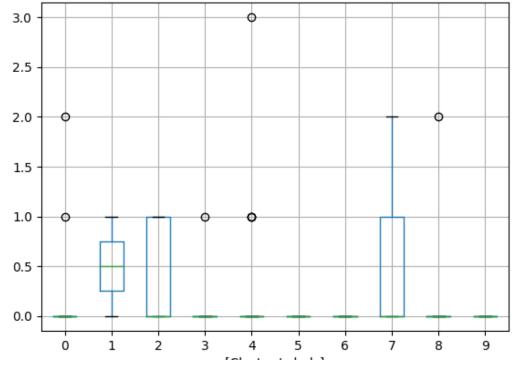




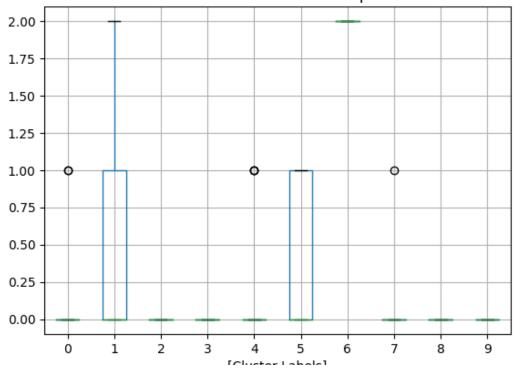
### What about not so common food outlets?

• Vientamse restaurants only appear in some clusters





#### Boxplot grouped by Cluster Labels Number of Vietnamese Restaurant outlets per cluster in toronto



### Conclusions

If you want to start a new restaurant its worth looking what food outlets exists in similar Neighbourhoods

If you are launching a common food outlets then all neighbourhoods will likely support your restaurant

However, if your restaurant is of a less common genre then its worth looking for a Neighbourhood which supports restaurants of a similar genre