The background of the slide is a rustic wooden surface, possibly a cutting board or table, with a prominent wood grain. On the left side, there is a collection of fresh vegetables including red bell peppers, mushrooms, onions, and green onions. On the right side, there are three wooden spoons of different sizes and shapes. The overall aesthetic is warm and natural, suggesting a focus on food and cooking.

What and where to open a new food business

Capstone Project - 2020

Luccas Klotz

Business Problem

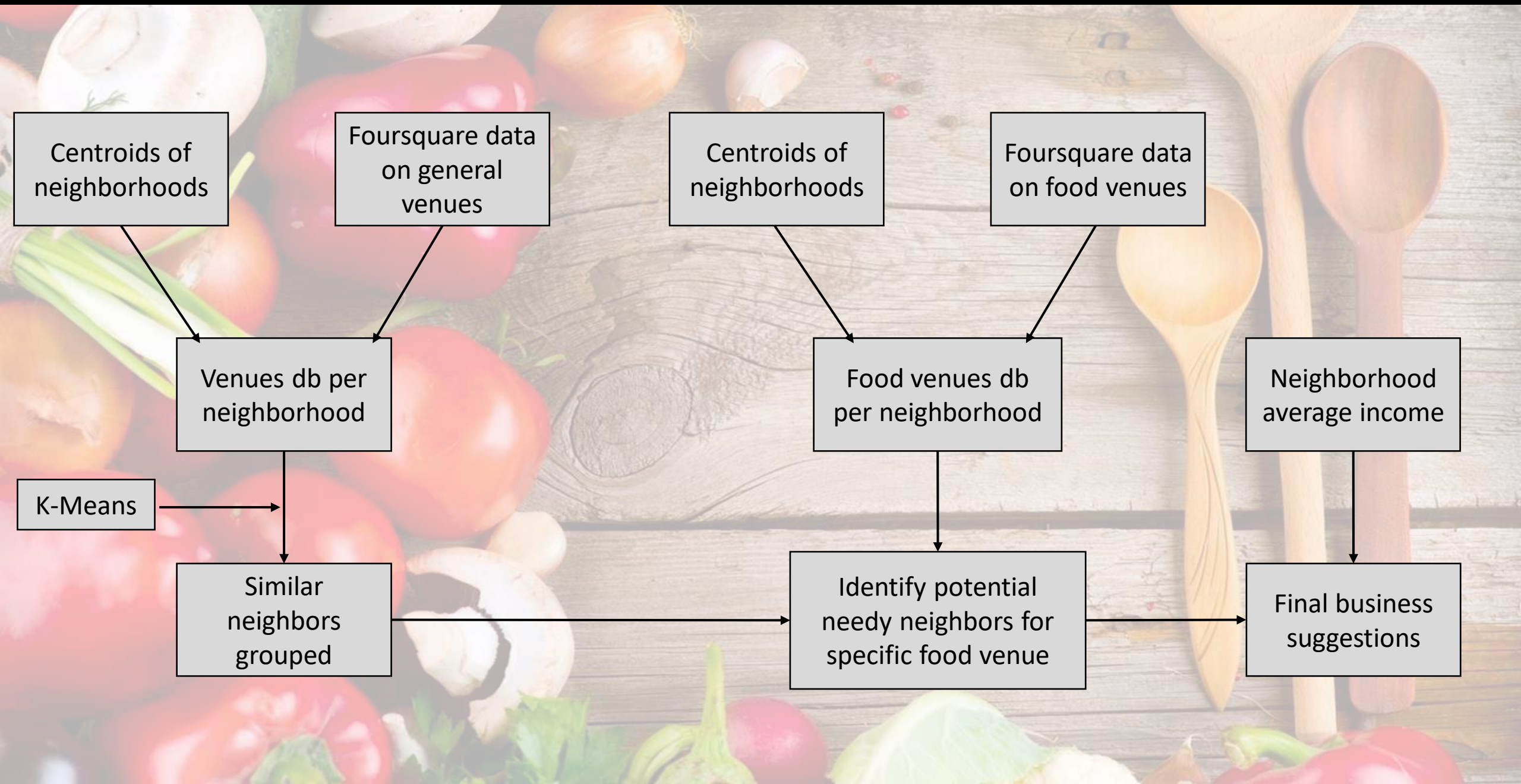
Investors and stakeholders of a new restaurant that will be opening in São Paulo, Brazil, are willing to take data-driven decisions on where and what type of restaurant to open.

Their main goal is to find out where the best place is, what type of restaurant or establishment and why.

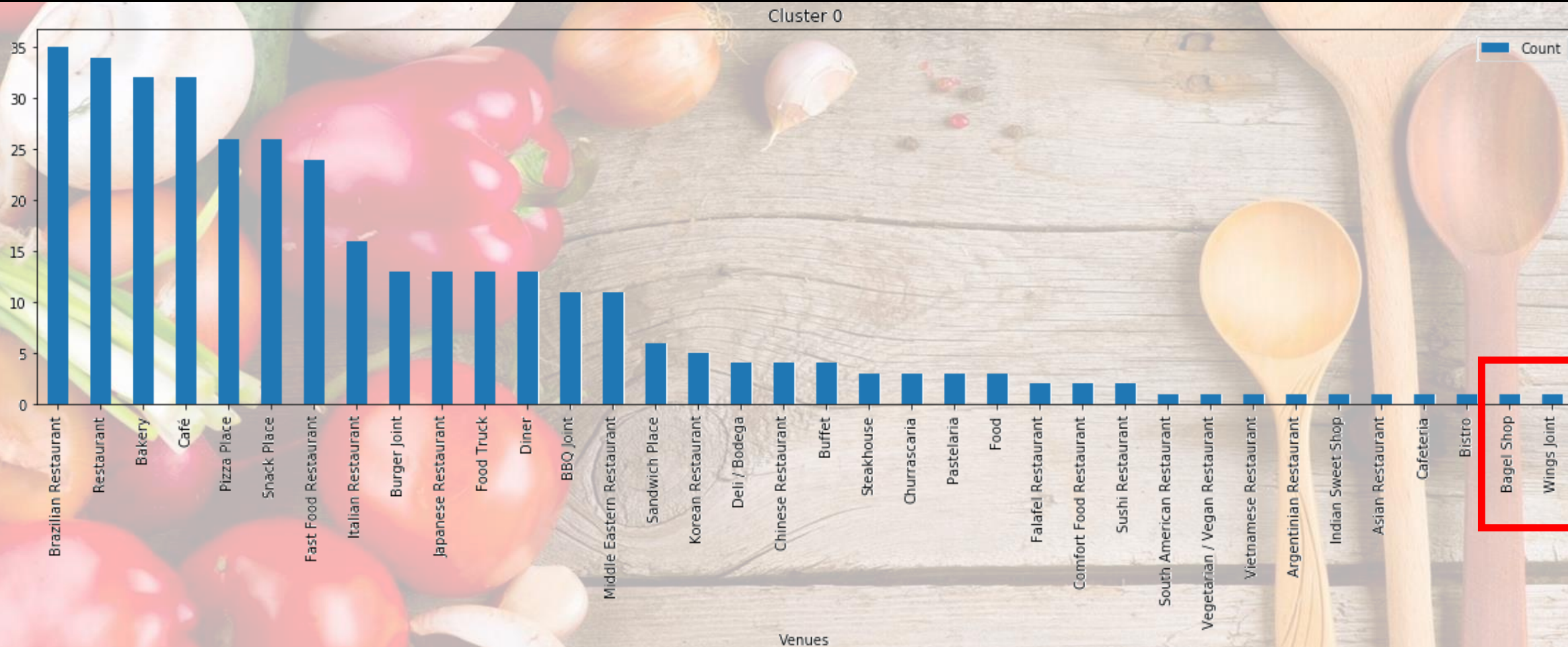
Two data sources will be used:

- Subway survey
 - An extensive survey had been carried out by São Paulo's subway in 2017
 - It has a lot of information about the city population, such as income, trips, from where to where and many other
 - It includes the coordinates of each neighborhood, and in each one many surveys were carried out
 - For this project, we will be using the 'centroid' of each zone with its average income, previously calculated
- Foursquare data
 - We will be using the centroids of each zone together with foursquare data using the foursquare API
 - We will acquire data from foursquare database to each zone, such as number and types of restaurants and other types of establishments relevant to our analysis

Methodology

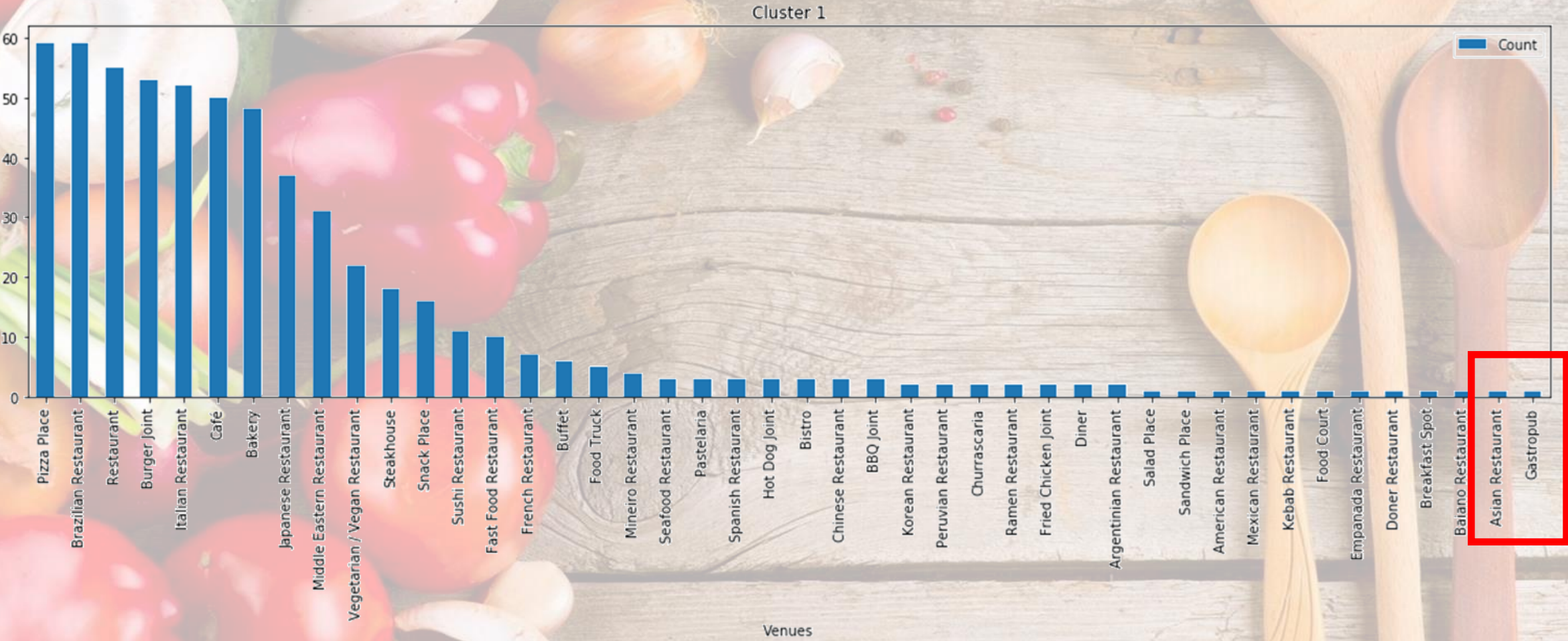


Results



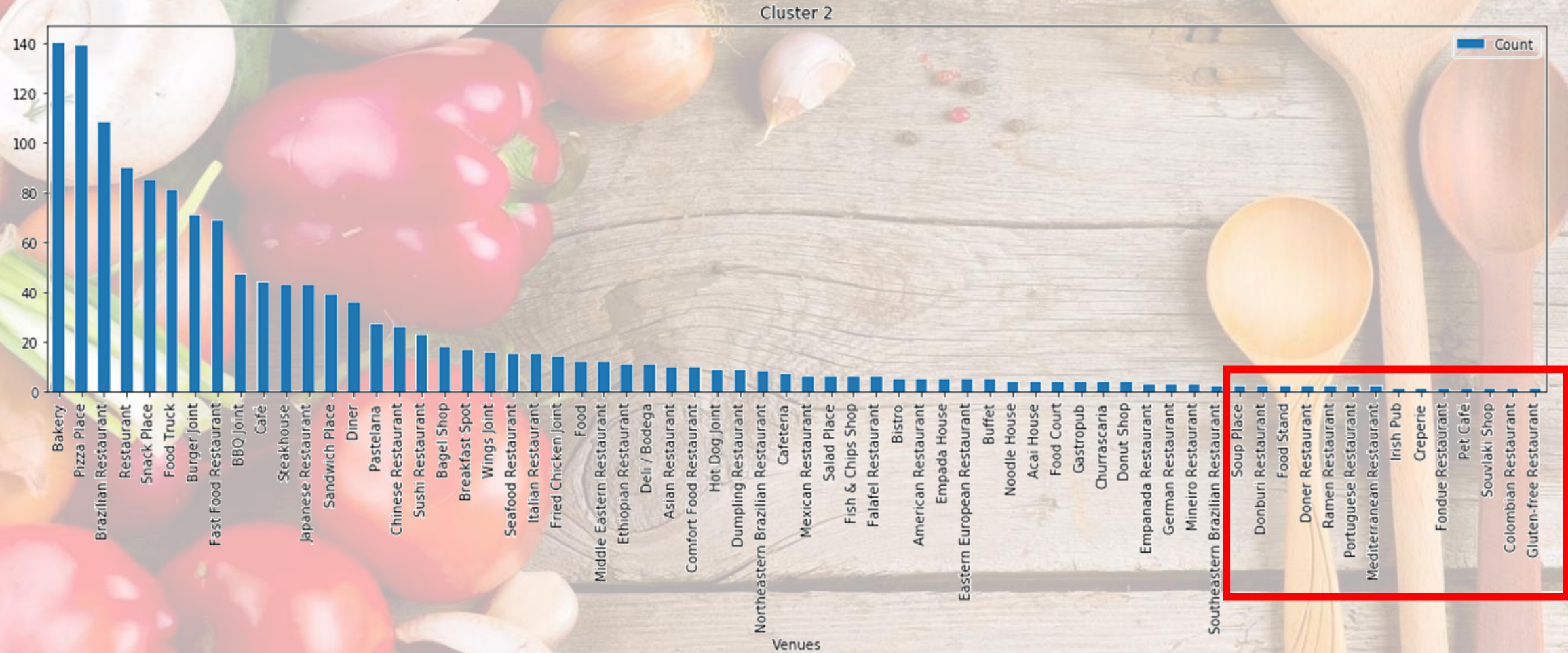
In neighborhoods on cluster 0, possible opportunities are wings joints and bagel shops

Results



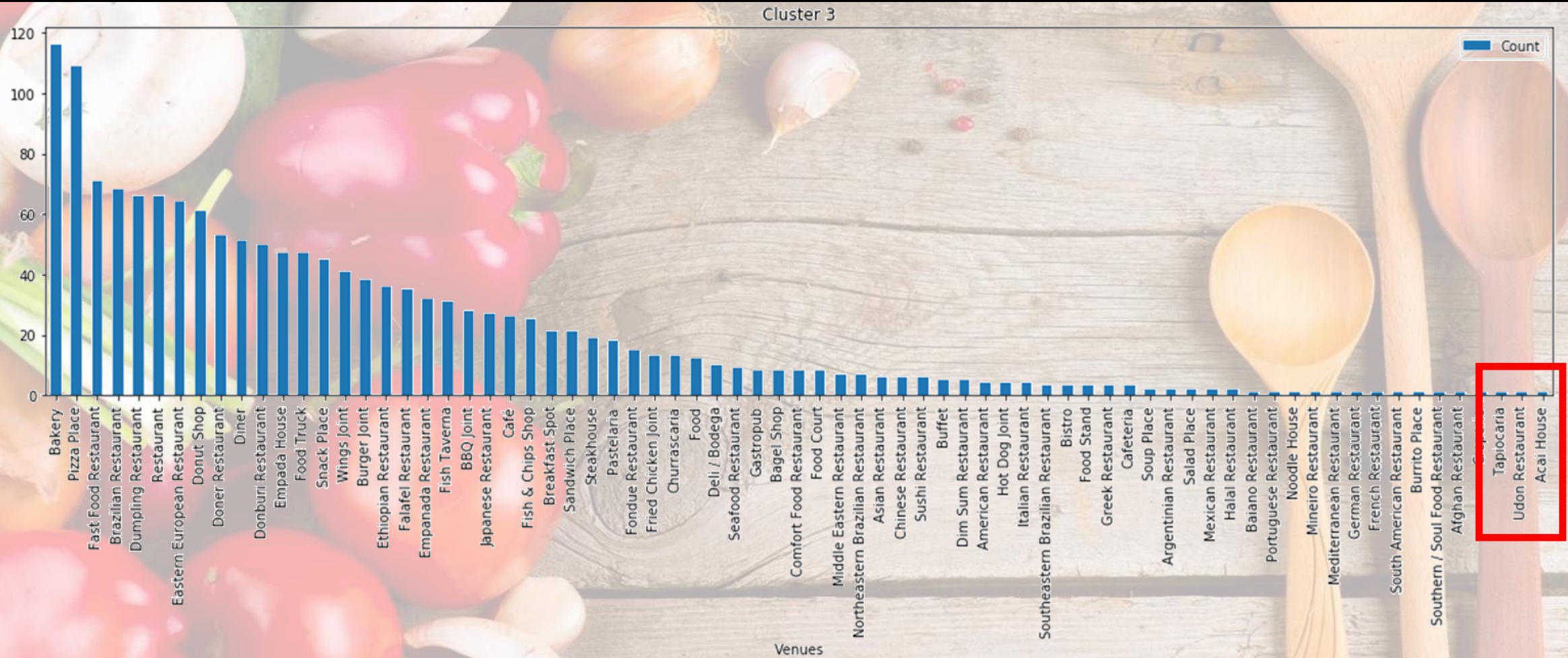
In neighborhoods on cluster 1, possible opportunities are gastropubs and asian restaurants

Results



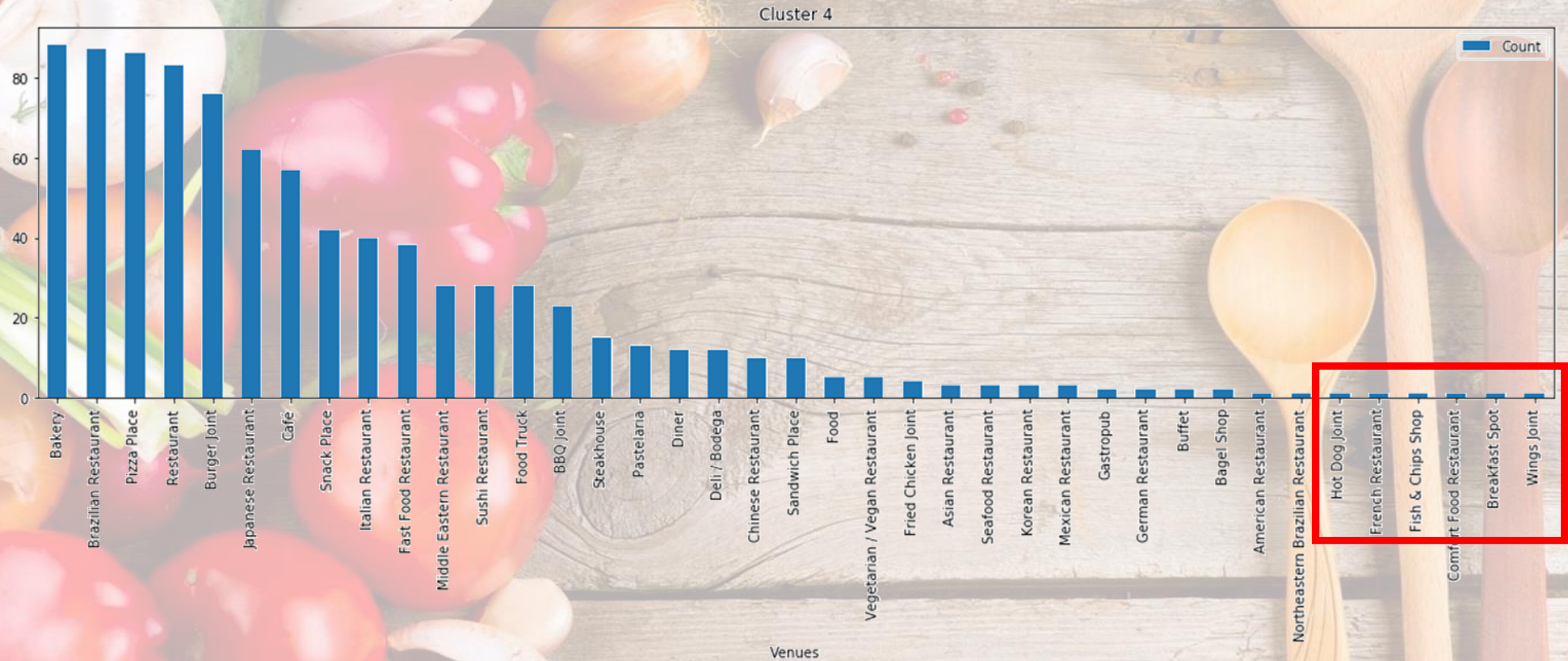
Lots of options on cluster 2, such as Irish pubs and Fondue restaurants

Results



Açaí house and tapiocaria looks good for cluster 3

Results



Wings joint again! And maybe a fish & chips shop!

Conclusion and Recommendations

- With this simple methodology, we already identified some opportunities out there for our new business
- We have successfully identified new food businesses around the city, using a clusterization technique to group similar neighborhoods and analyzing popular venues within each group but not in specific neighborhoods, which they are missing, so that is an opportunity.
- However, we have used a relatively shallow approach to a much complex problem. The foursquare API only allows to extract up to 100 venues per call with a limit of calls per day and hour, so a very rich and full of data analysis can not be carried out using the free version of the API.
- We can always further refine our analysis by adding relevant data and focusing our analysis on certain regions or neighborhoods, bringing up new analysis for a more robust result.