

# FINDING AN APPROPRIATE LOCATION IN TOKYO FOR FOREIGN F&B OWNER

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# Finding an appropriate F&B location

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Tokyo, the capital of Japan

- 23 wards and over 15mm population
- 226 Michelin-starred restaurants
- Numerous options of food (Japanese, Chinese, Italian, French) and severe competitions.

Among 23 wards, where should you open a new restaurant?

# Data Acquisition and cleaning

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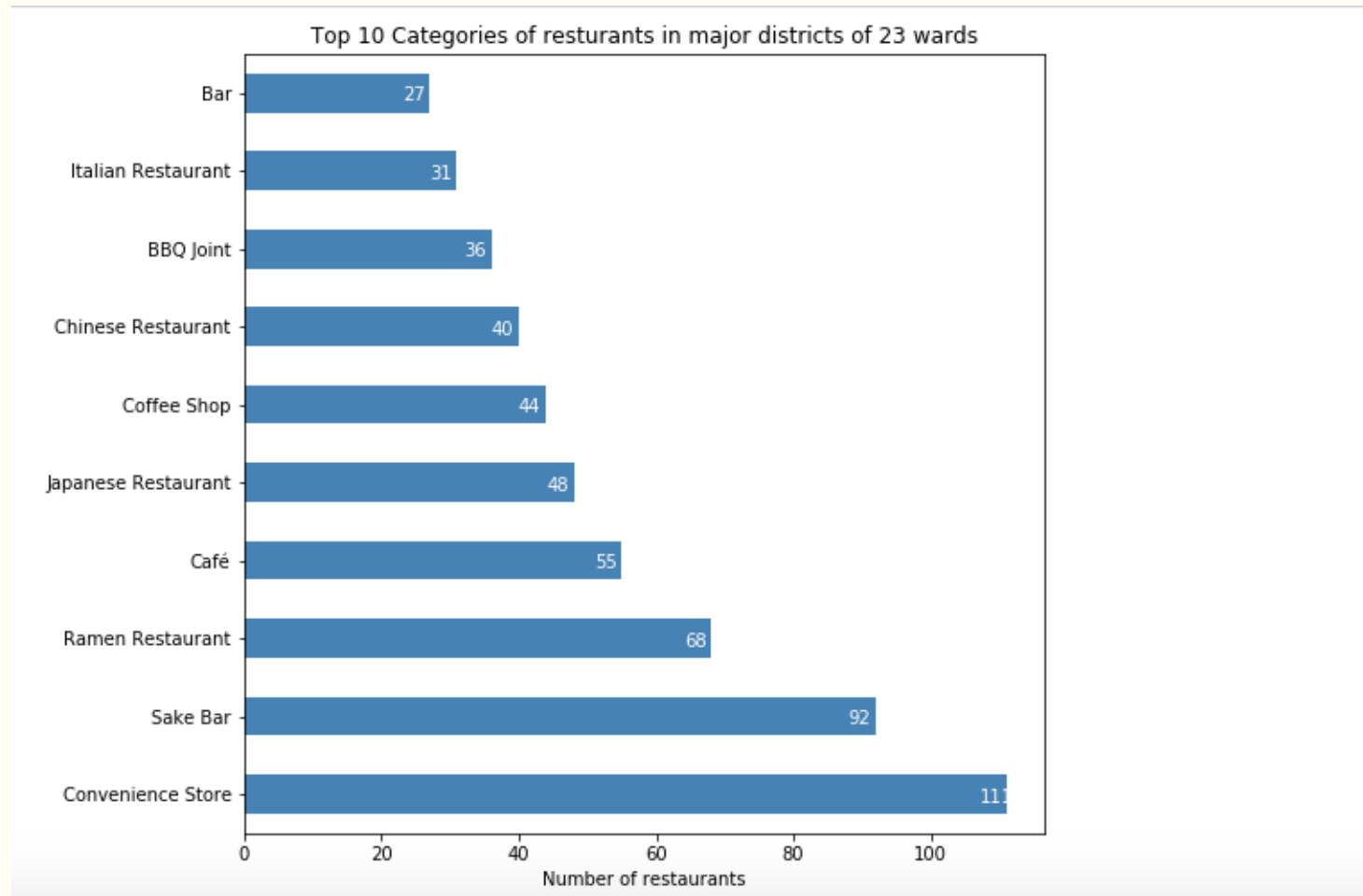
- 23 wards and neighborhoods Names : [Wikipedia](#)
- Land price JPY/sqm: [Utinokai](#)
- Location latitude / longitude: Geopy Client method
- Venus info: Foursquare API
- 1341 venues data points across 203 categories are retrieved thru API

# Data Sample pulled from Foursquare API

|    | Neighborhood | 1st Most Common Venue | 2nd Most Common Venue | 3rd Most Common Venue | 4th Most Common Venue    | 5th Most Common Venue | 6th Most Common Venue | 7th Most Common Venue    | 8th Most Common Venue | 9th Most Common Venue | 10th Most Common Venue | UnitPrice |
|----|--------------|-----------------------|-----------------------|-----------------------|--------------------------|-----------------------|-----------------------|--------------------------|-----------------------|-----------------------|------------------------|-----------|
| 0  | Aoto         | Convenience Store     | Ramen Restaurant      | Chinese Restaurant    | Italian Restaurant       | Japanese Restaurant   | Sake Bar              | Concert Hall             | Noodle House          | Bookstore             | Steakhouse             | 324,080   |
| 1  | Ariake       | Convenience Store     | Bus Stop              | Coffee Shop           | Italian Restaurant       | Plaza                 | Café                  | Hotel                    | Chinese Restaurant    | Ramen Restaurant      | Japanese Restaurant    | 637,570   |
| 2  | Koiwa        | Convenience Store     | Ramen Restaurant      | Japanese Restaurant   | Discount Store           | Coffee Shop           | Sake Bar              | Grocery Store            | Italian Restaurant    | Takoyaki Place        | Shopping Mall          | 330,471   |
| 3  | Akabane      | Sake Bar              | Convenience Store     | Ramen Restaurant      | Soba Restaurant          | BBQ Joint             | Coffee Shop           | Bar                      | Restaurant            | Shopping Mall         | Café                   | 542,465   |
| 4  | Arakawa      | Convenience Store     | Chinese Restaurant    | Grocery Store         | Park                     | Ramen Restaurant      | Noodle House          | Italian Restaurant       | Deli / Bodega         | Soba Restaurant       | Coffee Shop            | 472,613   |
| 5  | Ayase        | Convenience Store     | Park                  | Udon Restaurant       | Gym                      | Donut Shop            | Flea Market           | Fish Market              | Fast Food Restaurant  | Fabric Shop           | Event Space            | 293,693   |
| 6  | Hongō        | Convenience Store     | Café                  | Japanese Restaurant   | Mediterranean Restaurant | Deli / Bodega         | Rest Area             | Pizza Place              | Park                  | Chinese Restaurant    | Bus Stop               | 943,847   |
| 7  | Ikebukuro    | Sake Bar              | Café                  | Sushi Restaurant      | Yoshoku Restaurant       | Japanese Restaurant   | Coffee Shop           | Dessert Shop             | Ramen Restaurant      | Plaza                 | Steakhouse             | 732,511   |
| 8  | Itabashi     | Convenience Store     | Park                  | Italian Restaurant    | Hobby Shop               | Rest Area             | Plaza                 | Chinese Restaurant       | Bus Stop              | Bowling Alley         | Grocery Store          | 437,376   |
| 9  | Kinshichō    | Sake Bar              | Ramen Restaurant      | Coffee Shop           | Pub                      | Chinese Restaurant    | BBQ Joint             | Hotel                    | Clothing Store        | Thai Restaurant       | Japanese Restaurant    | 607,461   |
| 10 | Kōenji       | Sake Bar              | Ramen Restaurant      | Café                  | Italian Restaurant       | Bar                   | Convenience Store     | Chinese Restaurant       | BBQ Joint             | Indian Restaurant     | Rock Club              | 557,008   |
| 11 | Meguro       | Japanese Restaurant   | Convenience Store     | Chinese Restaurant    | Grocery Store            | Bus Stop              | Italian Restaurant    | Sushi Restaurant         | Men's Store           | Noodle House          | Park                   | 863,427   |
| 12 | Nagatachō    | Convenience Store     | Coffee Shop           | Japanese Restaurant   | Hotel                    | Intersection          | Gym                   | Pizza Place              | Ramen Restaurant      | Diner                 | Chinese Restaurant     | 2,602,846 |
| 13 | Nakano       | Ramen Restaurant      | Convenience Store     | Grocery Store         | Park                     | Sake Bar              | Café                  | Italian Restaurant       | Bath House            | Japanese Restaurant   | Jazz Club              | 597,965   |
| 14 | Nerima       | Convenience Store     | Café                  | Chinese Restaurant    | Supermarket              | Karaoke Box           | Bus Stop              | Bike Rental / Bike Share | Metro Station         | Park                  | Bakery                 | 400,039   |
| 15 | Nihonbashi   | BBQ Joint             | Convenience Store     | Department Store      | Japanese Restaurant      | Italian Restaurant    | Bakery                | Coffee Shop              | Sake Bar              | Hotel                 | Pub                    | 2,688,537 |
| 16 | Odaiba       | Japanese Restaurant   | Convenience Store     | Bus Stop              | Coffee Shop              | Intersection          | Pier                  | Hot Spring               | Bar                   | Soccer Field          | Smoke Shop             | 2,180,846 |
| 17 | Setagaya     | Convenience Store     | Café                  | Sake Bar              | Bakery                   | Tram Station          | Restaurant            | Ramen Restaurant         | Road                  | Park                  | Outdoor Sculpture      | 665,336   |
| 18 | Shibuya      | Café                  | Record Shop           | Rock Club             | Steakhouse               | Chinese Restaurant    | Ramen Restaurant      | Coffee Shop              | Concert Hall          | Indie Movie Theater   | Furniture / Home Store | 1,360,622 |
| 19 | Shinagawa    | Convenience Store     | BBQ Joint             | Bus Stop              | Canal                    | Grocery Store         | Donburi Restaurant    | Park                     | Soba Restaurant       | Train Station         | Toll Booth             | 766,540   |
| 20 | Shinjuku     | Bar                   | Sake Bar              | Ramen Restaurant      | BBQ Joint                | Rock Club             | Pub                   | Movie Theater            | Chinese Restaurant    | Coffee Shop           | Hotel                  | 940,756   |
| 21 | Ueno         | Sake Bar              | Japanese Restaurant   | Convenience Store     | Ramen Restaurant         | Chinese Restaurant    | Yoshoku Restaurant    | Soba Restaurant          | Pub                   | Grocery Store         | Tonkatsu Restaurant    | 1,025,887 |
| 22 | Ōmori        | Convenience Store     | Sake Bar              | Ramen Restaurant      | Coffee Shop              | Discount Store        | BBQ Joint             | Café                     | Japanese Restaurant   | Indian Restaurant     | Soba Restaurant        | 557,391   |

# Top 10 Categories of restaurants in major districts of 23 wards

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# Kmeans Clustering

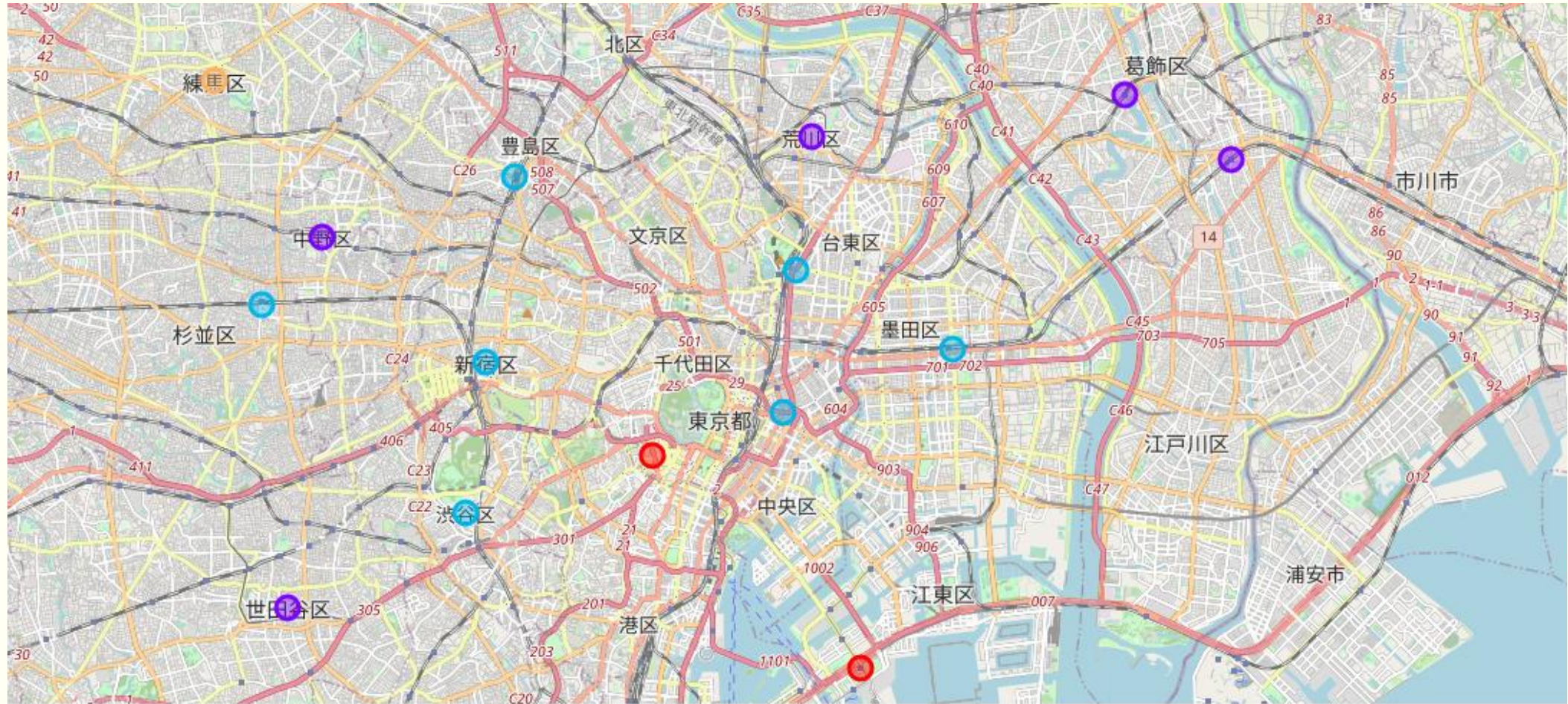
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|   | Cluster Labels | Neighborhood | 1st Most Common Venue | 2nd Most Common Venue | 3rd Most Common Venue | 4th Most Common Venue    | 5th Most Common Venue | 6th Most Common Venue | 7th Most Common Venue |
|---|----------------|--------------|-----------------------|-----------------------|-----------------------|--------------------------|-----------------------|-----------------------|-----------------------|
| 0 | 1              | Aoto         | Convenience Store     | Ramen Restaurant      | Chinese Restaurant    | Italian Restaurant       | Japanese Restaurant   | Sake Bar              | Concert Hall          |
| 1 | 0              | Ariake       | Convenience Store     | Bus Stop              | Coffee Shop           | Italian Restaurant       | Plaza                 | Café                  | Hotel                 |
| 2 | 1              | Koiwa        | Convenience Store     | Ramen Restaurant      | Japanese Restaurant   | Discount Store           | Coffee Shop           | Sake Bar              | Grocery Store         |
| 3 | 2              | Akabane      | Sake Bar              | Convenience Store     | Ramen Restaurant      | Soba Restaurant          | BBQ Joint             | Coffee Shop           | Bar                   |
| 4 | 1              | Arakawa      | Convenience Store     | Chinese Restaurant    | Grocery Store         | Park                     | Ramen Restaurant      | Noodle House          | Italian Restaurant    |
| 5 | 3              | Ayase        | Convenience Store     | Park                  | Udon Restaurant       | Gym                      | Donut Shop            | Flea Market           | Fish Market           |
| 6 | 1              | Hongō        | Convenience Store     | Café                  | Japanese Restaurant   | Mediterranean Restaurant | Deli / Bodega         | Rest Area             | Pizza Place           |
| 7 | 2              | Ikebukuro    | Sake Bar              | Café                  | Sushi Restaurant      | Yoshoku Restaurant       | Japanese Restaurant   | Coffee Shop           | Dessert Shop          |
| 8 | 4              | Itabashi     | Convenience Store     | Park                  | Italian Restaurant    | Hobby Shop               | Rest Area             | Plaza                 | Chinese Restaurant    |



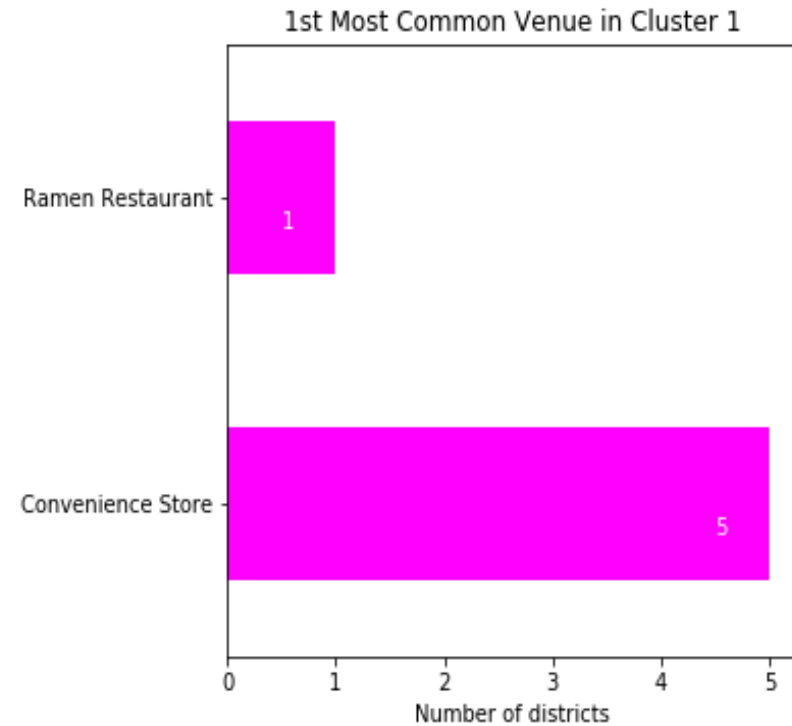
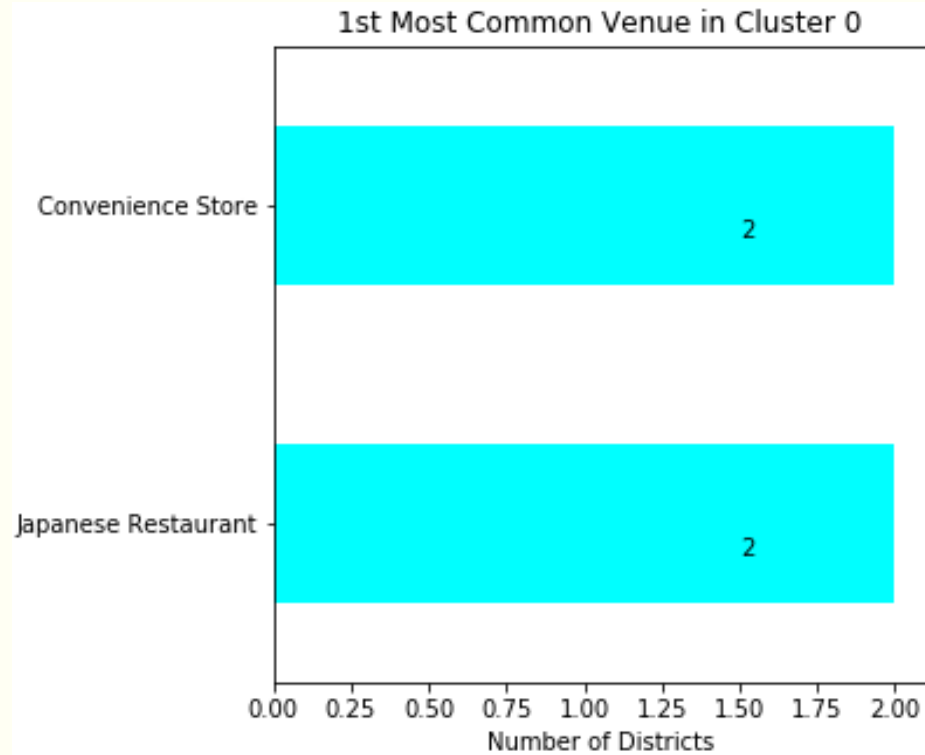
# Folium Visualization of clustering result

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# Ranking in each cluster

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## Findings and Results

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- Over half of the districts have convenience store ranked as the top venue category.
- There are more Chinese restaurants than Korean bbq and Italian cuisines. French cuisine is not ranked in top 10
- Suggest to open bar, Sake bar type in Shinjuku, Nihonbashi, Shibuya
- Avoid to open convenience store in 9 districts
- Nagatacho and Odaiba are similar in terms of venue category characteristics and land price

## Conclusion and Future directions

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- Suggested certain districts for F&B owners to consider to open restaurants.
- Identified 9 districts to avoid opening convenience store. (Aoto, Koiwa, Arakawa, Hongo, Itabashi..)
- Room to improve accuracy of clustering for example 1) embed population and density for analysis 2) Include multiple districts in each ward.