

The slide features five light purple circles. One is an outline at the top left, and the other four are solid. They are arranged in a loose pattern around the text.

# Recommended location for opening a fashion store in Paris

Presentation

# Introduction

## Hierarchical model of the fashion industry

Couture (haute couture)  
Chanel and Christian Dior

Designer  
Dries Van Noten and Prada

Bridge or diffusion  
Marc Jacobs and DKNY

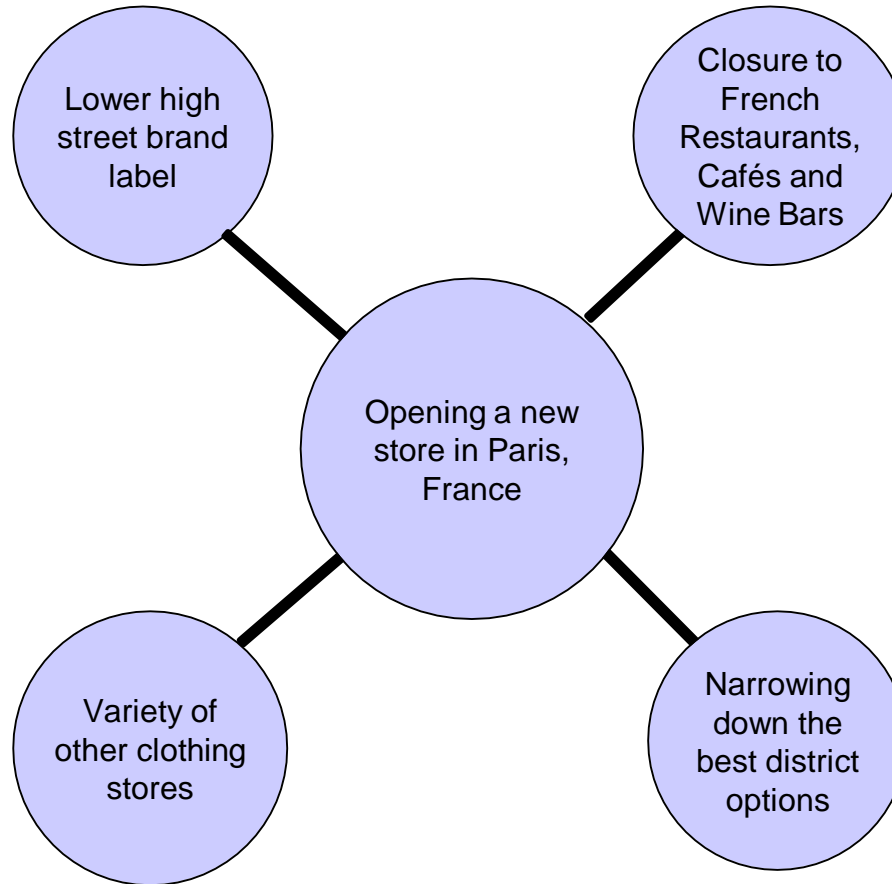
Upper high street  
Karen Millen and Jones New York

Mid-high street  
Gap and Next

Lower high street  
H&M and New Look

Budget  
Primark and Cherokee

# Business Problem



# Data

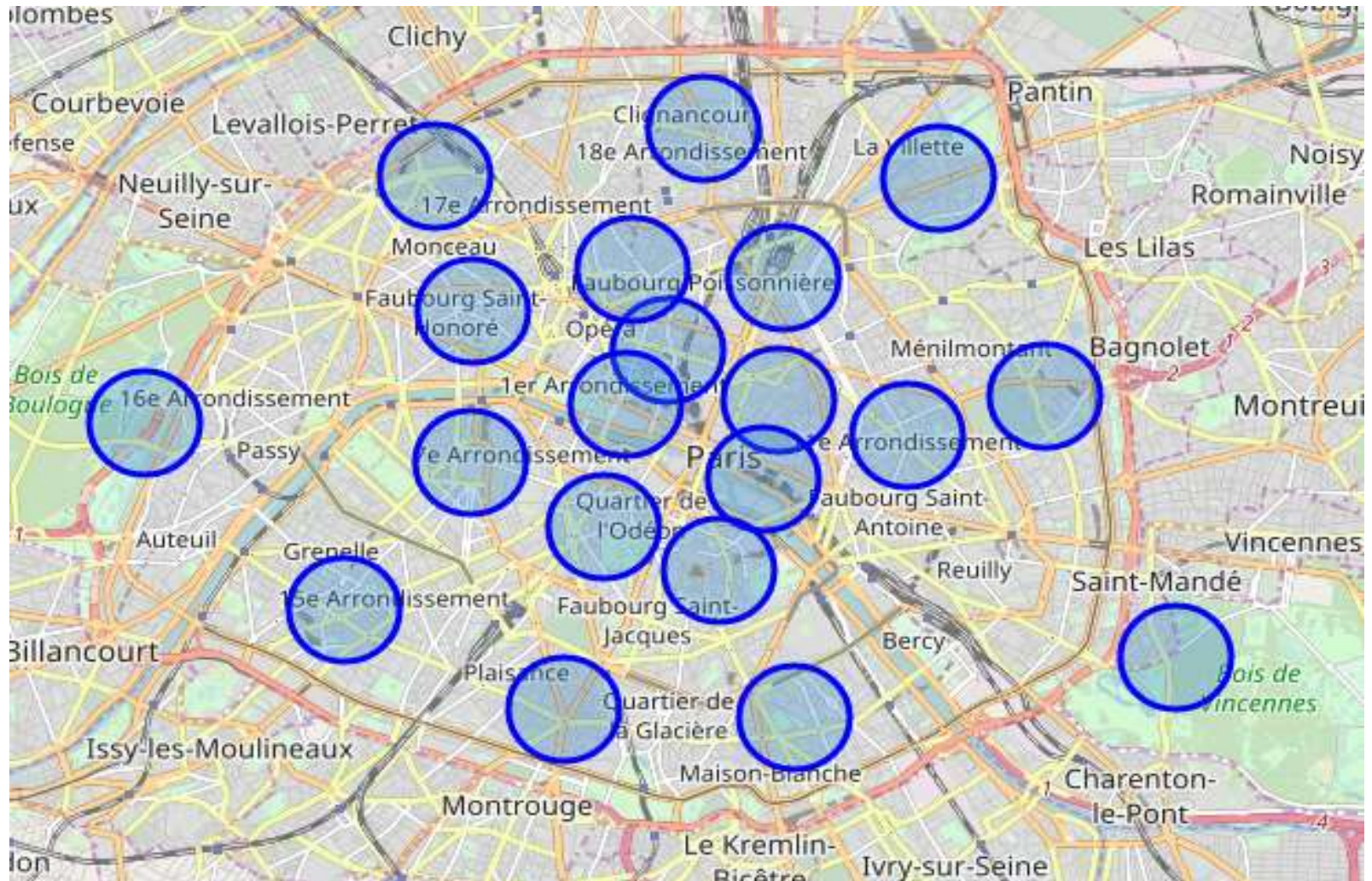
| CAR |    | NAME                | NSQAR     | CAR.1 | CARINSEE | LAR        | NSQCO     | SURFACE     | PERIMETRE | Geometry_X | Geometry_Y |
|-----|----|---------------------|-----------|-------|----------|------------|-----------|-------------|-----------|------------|------------|
| 0   | 3  | Temple              | 750000003 | 3     | 3        | 3eme Ardt  | 750001537 | 1170882828  | 4519264   | 48.862872  | 2.360001   |
| 1   | 19 | Buttes-Chaumont     | 750000019 | 19    | 19       | 19eme Ardt | 750001537 | 6792651129  | 11253182  | 48.887076  | 2.384821   |
| 2   | 14 | Observatoire        | 750000014 | 14    | 14       | 14eme Ardt | 750001537 | 5614877309  | 10317483  | 48.829245  | 2.326542   |
| 3   | 10 | Entrepot            | 750000010 | 10    | 10       | 10eme Ardt | 750001537 | 2891739442  | 6739375   | 48.876130  | 2.360728   |
| 4   | 12 | Reuilly             | 750000012 | 12    | 12       | 12eme Ardt | 750001537 | 16314782637 | 24089666  | 48.834974  | 2.421325   |
| 5   | 16 | Passy               | 750000016 | 16    | 16       | 16eme Ardt | 750001537 | 16372542129 | 17416110  | 48.860392  | 2.261971   |
| 6   | 11 | Popincourt          | 750000011 | 11    | 11       | 11eme Ardt | 750001537 | 3665441552  | 8282012   | 48.859059  | 2.380058   |
| 7   | 2  | Bourse              | 750000002 | 2     | 2        | 2eme Ardt  | 750001537 | 991153745   | 4554104   | 48.868279  | 2.342803   |
| 8   | 4  | Hotel-de-Ville      | 750000004 | 4     | 4        | 4eme Ardt  | 750001537 | 1600585632  | 5420908   | 48.854341  | 2.357630   |
| 9   | 17 | Batignolles-Monceau | 750000017 | 17    | 17       | 17eme Ardt | 750001537 | 5668834504  | 10775580  | 48.887327  | 2.306777   |
| 10  | 18 | Buttes-Montmartre   | 750000018 | 18    | 18       | 18eme Ardt | 750001537 | 5996051308  | 9916464   | 48.892569  | 2.348161   |
| 11  | 1  | Louvre              | 750000001 | 1     | 1        | 1er Ardt   | 750001537 | 1824612860  | 6054937   | 48.862563  | 2.336443   |
| 12  | 5  | Pantheon            | 750000005 | 5     | 5        | 5eme Ardt  | 750001537 | 2539374623  | 6239195   | 48.844443  | 2.350715   |
| 13  | 7  | Palais-Bourbon      | 750000007 | 7     | 7        | 7eme Ardt  | 750001537 | 4090057185  | 8099425   | 48.856174  | 2.312188   |
| 14  | 20 | Menilmontant        | 750000020 | 20    | 20       | 20eme Ardt | 750001537 | 5983446037  | 10704940  | 48.863461  | 2.401188   |
| 15  | 8  | elysee              | 750000008 | 8     | 8        | 8eme Ardt  | 750001537 | 3880036397  | 7880533   | 48.872721  | 2.312554   |
| 16  | 9  | Opera               | 750000009 | 9     | 9        | 9eme Ardt  | 750001537 | 2178303275  | 6471588   | 48.877164  | 2.337458   |
| 17  | 13 | Gobelins            | 750000013 | 13    | 13       | 13eme Ardt | 750001537 | 7149311091  | 11546547  | 48.828388  | 2.362272   |
| 18  | 15 | Vaugirard           | 750000015 | 15    | 15       | 15eme Ardt | 750001537 | 8494994081  | 13678798  | 48.840085  | 2.292826   |
| 19  | 6  | Luxembourg          | 750000006 | 6     | 6        | 6eme Ardt  | 750001537 | 2153095586  | 6483687   | 48.849130  | 2.332898   |

# Cleaned Data

|    | Arrondissement_Num | Neighborhood        | French_Name | Latitude  | Longitude |
|----|--------------------|---------------------|-------------|-----------|-----------|
| 0  | 3                  | Temple              | 3eme Ardt   | 48.862872 | 2.360001  |
| 1  | 19                 | Buttes-Chaumont     | 19eme Ardt  | 48.887076 | 2.384821  |
| 2  | 14                 | Observatoire        | 14eme Ardt  | 48.829245 | 2.326542  |
| 3  | 10                 | Entrepot            | 10eme Ardt  | 48.876130 | 2.360728  |
| 4  | 12                 | Reuilly             | 12eme Ardt  | 48.834974 | 2.421325  |
| 5  | 16                 | Passy               | 16eme Ardt  | 48.860392 | 2.261971  |
| 6  | 11                 | Popincourt          | 11eme Ardt  | 48.859059 | 2.380058  |
| 7  | 2                  | Bourse              | 2eme Ardt   | 48.868279 | 2.342803  |
| 8  | 4                  | Hotel-de-Ville      | 4eme Ardt   | 48.854341 | 2.357630  |
| 9  | 17                 | Batignolles-Monceau | 17eme Ardt  | 48.887327 | 2.306777  |
| 10 | 18                 | Buttes-Montmartre   | 18eme Ardt  | 48.892569 | 2.348161  |
| 11 | 1                  | Louvre              | 1er Ardt    | 48.862563 | 2.336443  |
| 12 | 5                  | Pantheon            | 5eme Ardt   | 48.844443 | 2.350715  |
| 13 | 7                  | Palais-Bourbon      | 7eme Ardt   | 48.856174 | 2.312188  |
| 14 | 20                 | Menilmontant        | 20eme Ardt  | 48.863461 | 2.401188  |
| 15 | 8                  | elysee              | 8eme Ardt   | 48.872721 | 2.312554  |
| 16 | 9                  | Opera               | 9eme Ardt   | 48.877164 | 2.337458  |
| 17 | 13                 | Gobelins            | 13eme Ardt  | 48.828388 | 2.362272  |
| 18 | 15                 | Vaugirard           | 15eme Ardt  | 48.840085 | 2.292826  |
| 19 | 6                  | Luxembourg          | 6eme Ardt   | 48.849130 | 2.332898  |



# Map of Paris with the location of the neighborhoods



# Top 100 venues of the neighborhood

## 3eme Ardt

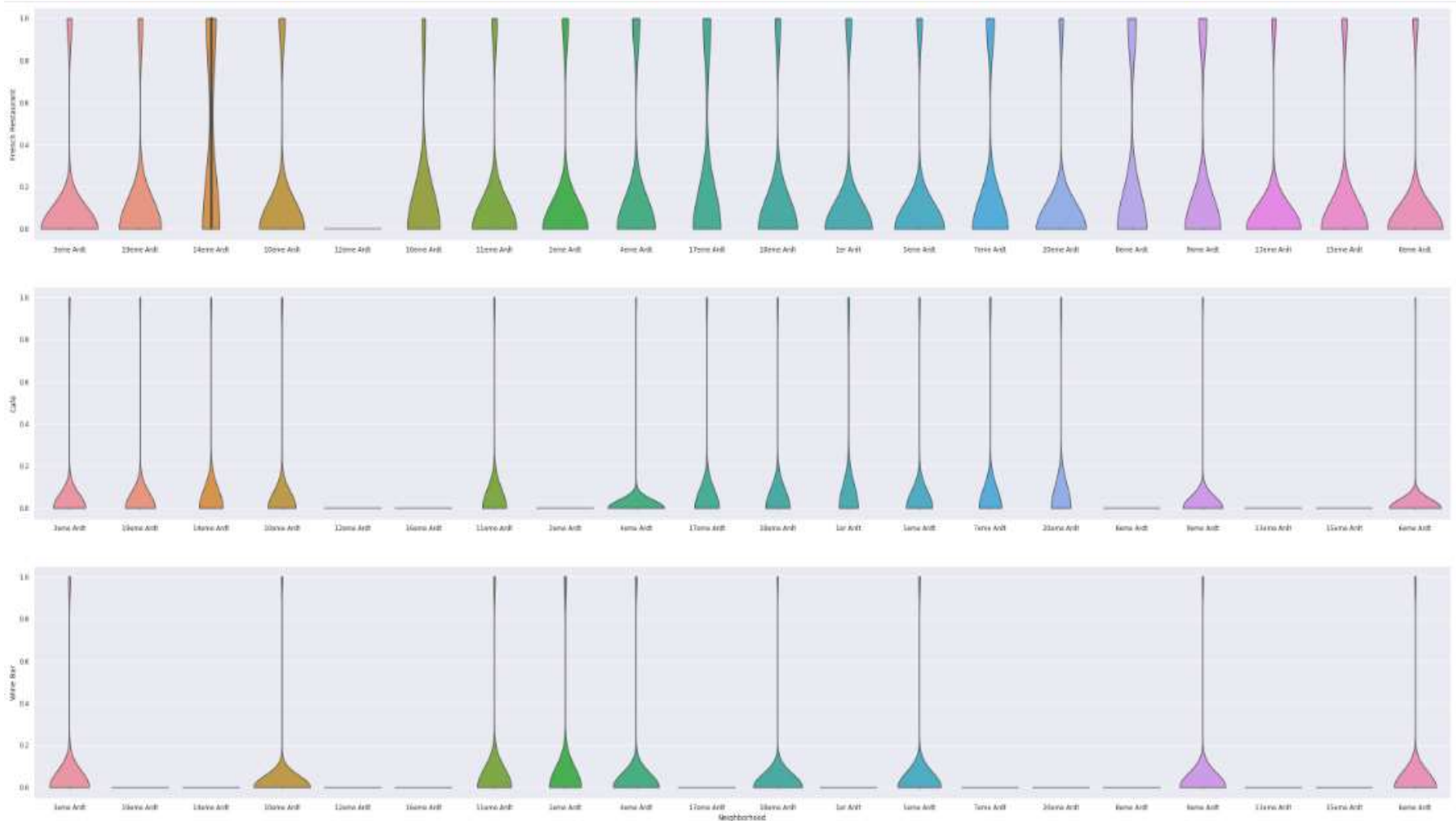
|    | name                      | categories          | lat       | lng      |
|----|---------------------------|---------------------|-----------|----------|
| 0  | Mmmozza                   | Sandwich Place      | 48.863910 | 2.360591 |
| 1  | Marché des Enfants Rouges | Farmers Market      | 48.862806 | 2.361996 |
| 2  | Square du Temple          | Park                | 48.864475 | 2.360816 |
| 3  | Chez Alain Miam Miam      | Sandwich Place      | 48.862369 | 2.361950 |
| 4  | Chez Alain Miam Miam      | Sandwich Place      | 48.862781 | 2.362064 |
| 5  | Hôtel Jules & Jim         | Hotel               | 48.863496 | 2.357395 |
| 6  | Fromagerie Jouannault     | Cheese Shop         | 48.862947 | 2.362530 |
| 7  | Les Enfants Rouges        | Wine Bar            | 48.863013 | 2.361260 |
| 8  | Gramme                    | Restaurant          | 48.863121 | 2.360375 |
| 9  | Strada Café               | Café                | 48.862224 | 2.357379 |
| 10 | Bontemps                  | Dessert Shop        | 48.863956 | 2.360725 |
| 11 | Paris New York            | Burger Joint        | 48.863843 | 2.362661 |
| 12 | SoMa                      | Japanese Restaurant | 48.861511 | 2.362146 |
| 13 | Les Enfants Du Marché     | French Restaurant   | 48.862746 | 2.361950 |
| 14 | Traiteur Marocain         | Moroccan Restaurant | 48.862923 | 2.361933 |
| 15 | Hank Burger               | Burger Joint        | 48.861340 | 2.358304 |
| 16 | The Broken Arm            | Boutique            | 48.864653 | 2.361433 |
| 17 | Café Charlot              | Bistro              | 48.862940 | 2.362580 |
| 18 | Biglove Caffè             | Italian Restaurant  | 48.862063 | 2.363557 |
| 19 | Little Red Door           | Speakeasy           | 48.863703 | 2.363514 |

# Unique venue categories

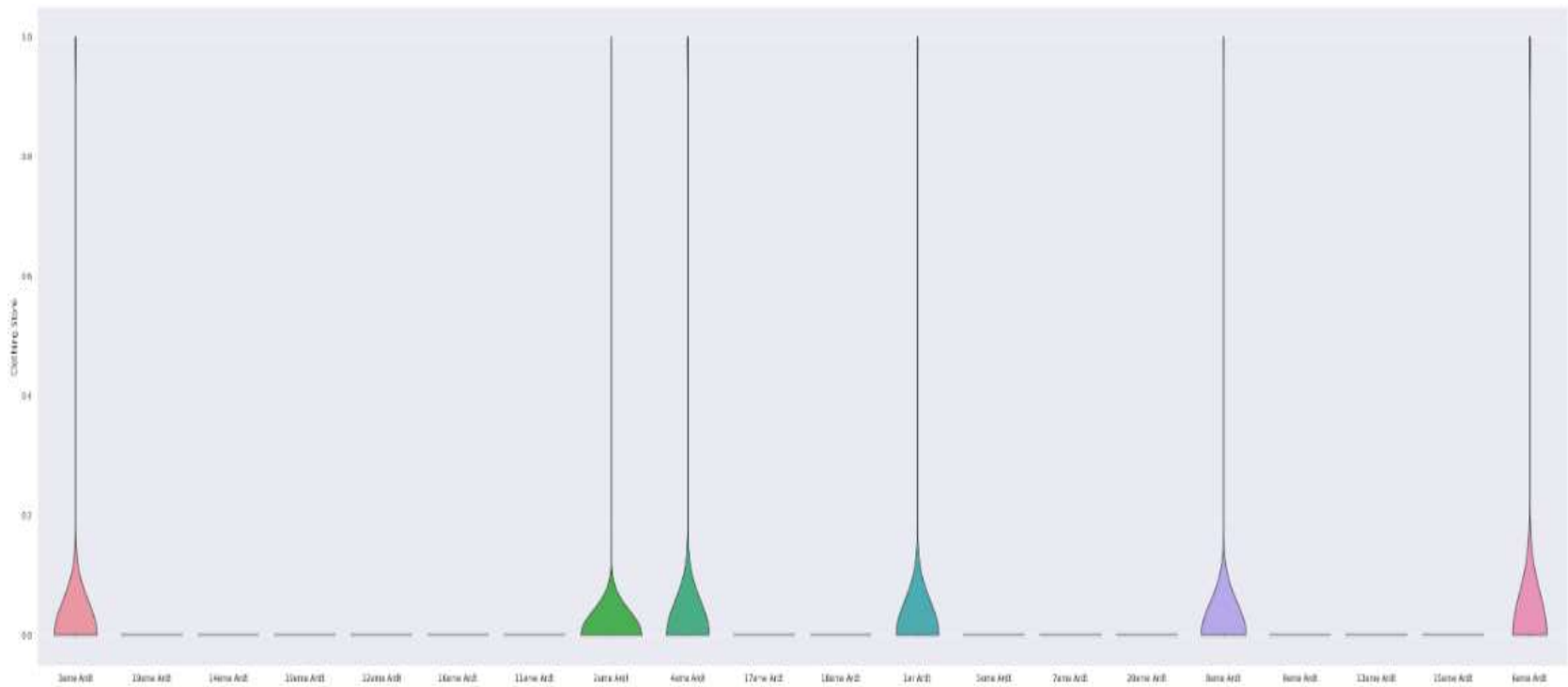
|             | Latitude | Longitude | Venue | Venue Latitude | Venue Longitude | Venue Category |
|-------------|----------|-----------|-------|----------------|-----------------|----------------|
| French_Name |          |           |       |                |                 |                |
| 10eme Ardt  | 100      | 100       | 100   | 100            | 100             | 100            |
| 11eme Ardt  | 67       | 67        | 67    | 67             | 67              | 67             |
| 12eme Ardt  | 6        | 6         | 6     | 6              | 6               | 6              |
| 13eme Ardt  | 60       | 60        | 60    | 60             | 60              | 60             |
| 14eme Ardt  | 29       | 29        | 29    | 29             | 29              | 29             |
| 15eme Ardt  | 64       | 64        | 64    | 64             | 64              | 64             |
| 16eme Ardt  | 12       | 12        | 12    | 12             | 12              | 12             |
| 17eme Ardt  | 60       | 60        | 60    | 60             | 60              | 60             |
| 18eme Ardt  | 45       | 45        | 45    | 45             | 45              | 45             |
| 19eme Ardt  | 43       | 43        | 43    | 43             | 43              | 43             |
| 1er Ardt    | 100      | 100       | 100   | 100            | 100             | 100            |
| 20eme Ardt  | 48       | 48        | 48    | 48             | 48              | 48             |
| 2eme Ardt   | 100      | 100       | 100   | 100            | 100             | 100            |
| 3eme Ardt   | 100      | 100       | 100   | 100            | 100             | 100            |
| 4eme Ardt   | 100      | 100       | 100   | 100            | 100             | 100            |
| 5eme Ardt   | 94       | 94        | 94    | 94             | 94              | 94             |
| 6eme Ardt   | 73       | 73        | 73    | 73             | 73              | 73             |
| 7eme Ardt   | 100      | 100       | 100   | 100            | 100             | 100            |
| 8eme Ardt   | 65       | 65        | 65    | 65             | 65              | 65             |
| 9eme Ardt   | 100      | 100       | 100   | 100            | 100             | 100            |



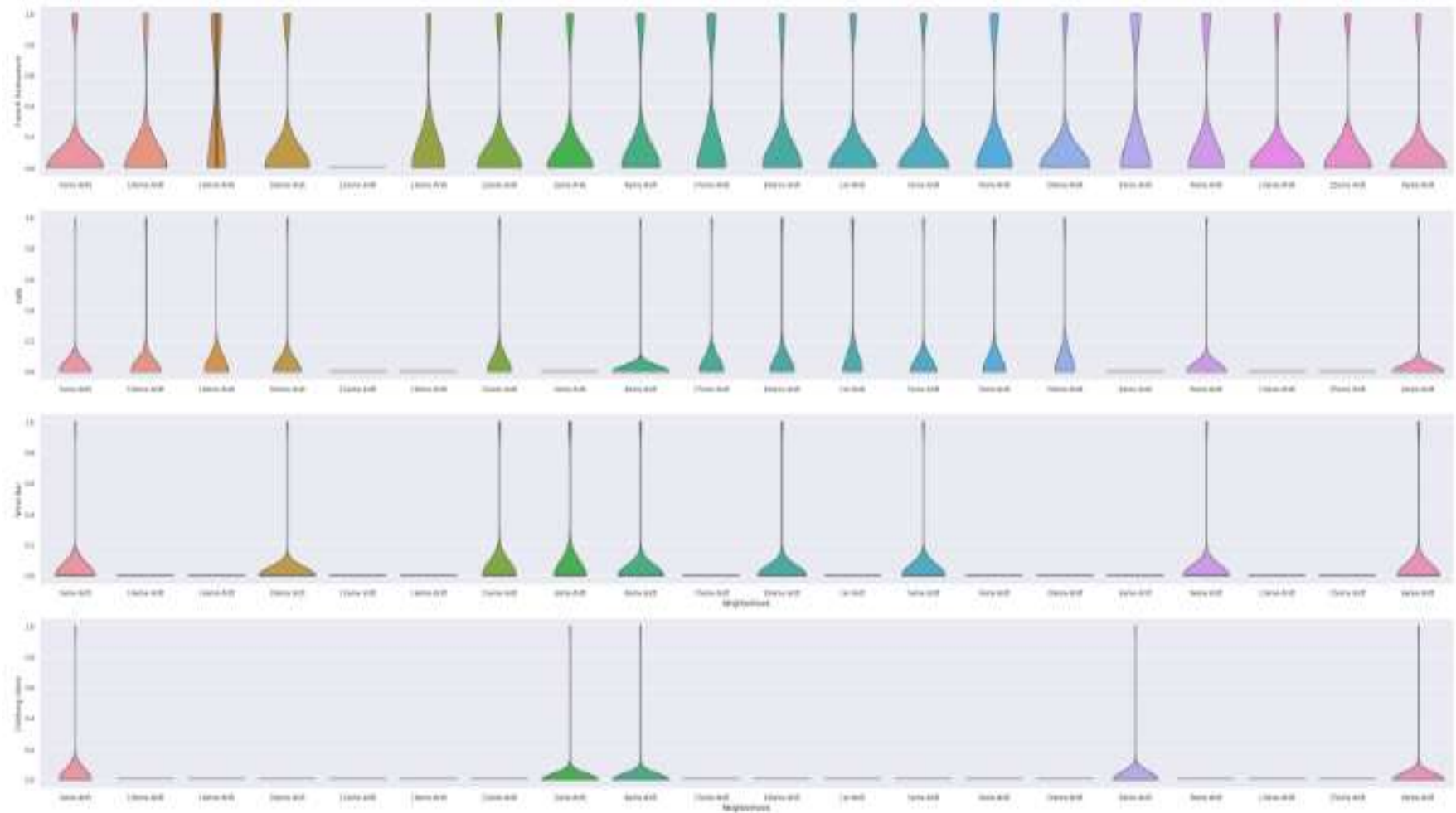
# Frequency distribution for the top 3 venue categories for each neighborhood



# Frequency of Clothing stores for each neighborhood



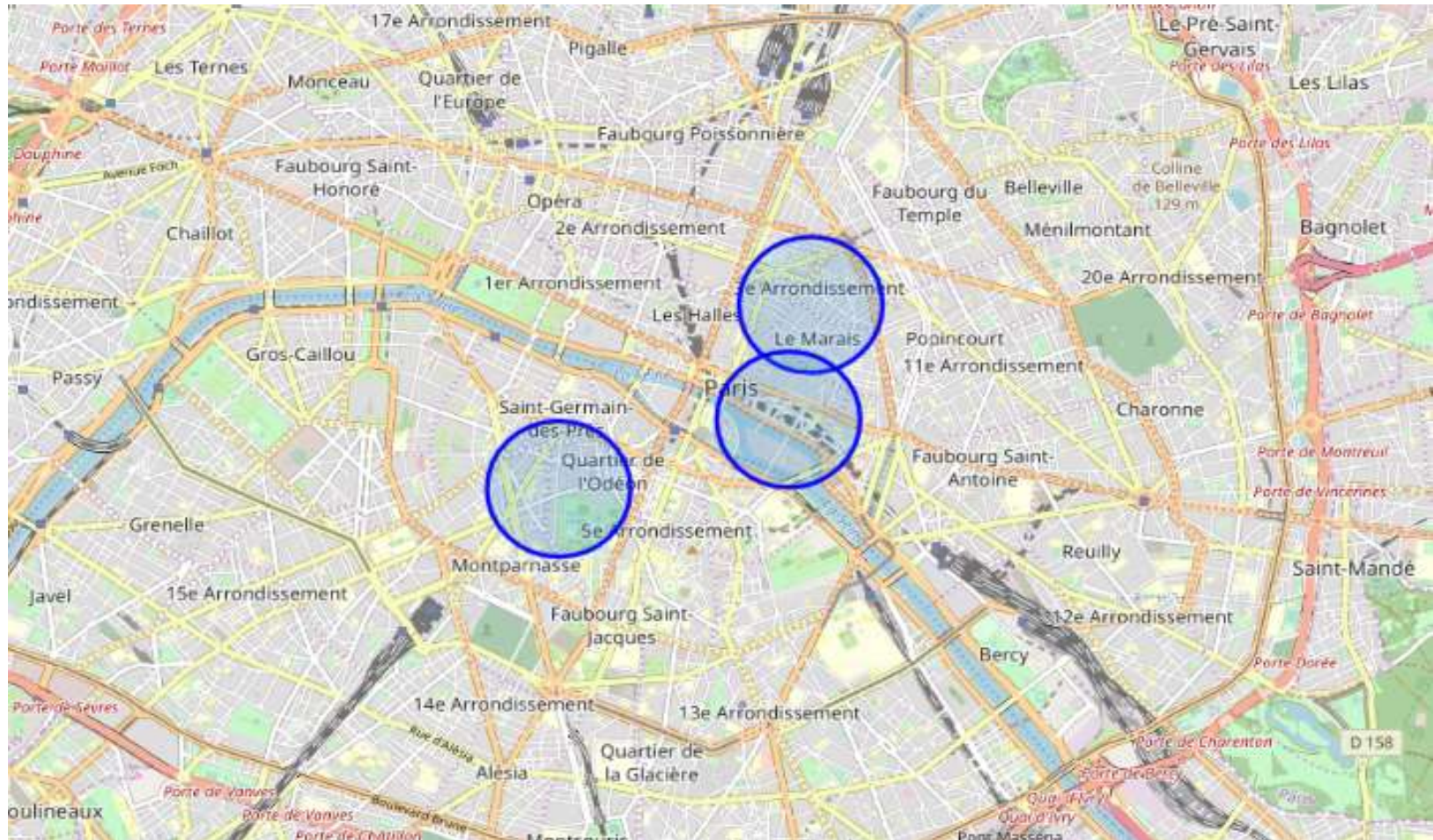
# Frequency distribution for each neighborhood



# Prospective neighborhoods for new store locations

|   | Arrondissement_Num | Neighborhood   | French_Name | Latitude  | Longitude |
|---|--------------------|----------------|-------------|-----------|-----------|
| 0 | 3                  | Temple         | 3eme Ardt   | 48.862872 | 2.360001  |
| 1 | 4                  | Hotel-de-Ville | 4eme Ardt   | 48.854341 | 2.357630  |
| 2 | 6                  | Luxembourg     | 6eme Ardt   | 48.849130 | 2.332898  |

# Prospective neighborhoods for new store locations on the map







# Results, discussion and conclusion

- Inferential analysis using the data, as well as domain knowledge of retail and marketing, allowed narrowing the search area down significantly from 20 potential districts to 3 that should suit the retail business.
- The analysis and results are not an end point, but rather a starting point that will guide the next part of the process to find specific store locations.
- Data has helped to provide a better strategy and data-driven decisions will lead to a better solution in the end.