A new restaurant in Zürich

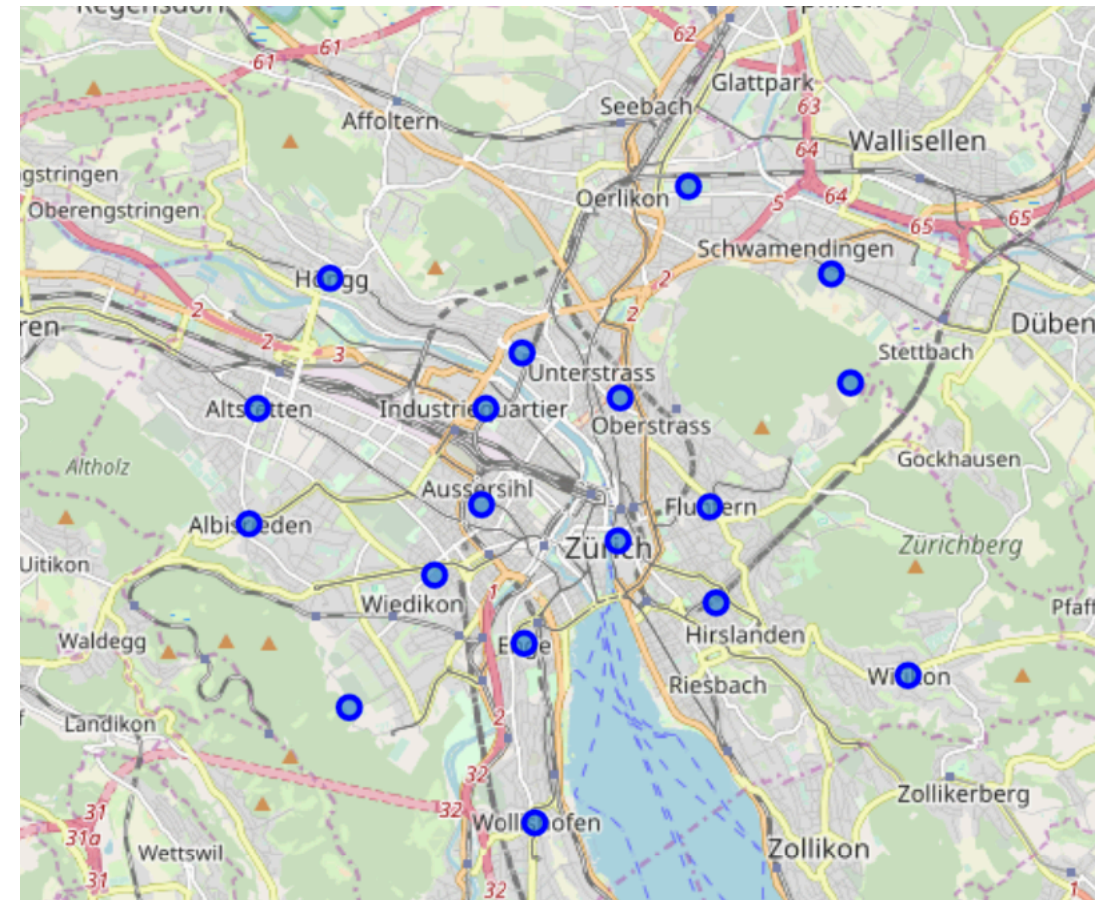preliminary studies

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Business problem

- Client: Italian restaurant franchise operating in IT, FR and DE

- Goal: expand the business to Switzerland

- Problem: find the best location for a test-opening in Zürich

Data Set 1

- Zürich neighbourhoods: geolocalization

	PostalCode	Neighborhood	Latitude	Longitude
0	8001	City, Hochschulen, Lindenhof, Rathaus	47.372394	8.542333
1	8002	Enge	47.361789	8.528708
2	8003	Alt-Wiedikon, Sihlfeld	47.365562	8.517851
3	8004	Hard, Langstrasse, Werd	47.381743	8.512554
4	8005	Escher Wyss, Gewerbeschule	47.390899	8.515360
5	8006	Oberstrass, Unterstrass	47.385706	8.549124
6	8008	Mühlebach, Seefeld, Weinegg	47.255395	8.695773
7	8032	Hirslanden, Hottingen	47.362948	8.564269
8	8037	Wipkingen	47.393495	8.528602
9	8038	Wollishofen	47.342427	8.530708
10	8041	Leimbach	47.390254	8.581406
11	8044	Fluntern	47.376777	8.558775
12	8045	Friesenberg	47.354922	8.500523
13	8046	Affoltern	47.278247	8.452152
14	8047	Albisrieden	47.374857	8.484657
15	8048	Altstetten	47.387403	8.486061
16	8049	Höngg	47.401660	8.497715
17	8050	Oerlikon, Saatlen	47.410421	8.544585
18	8051	Hirzenbach, Schwamendingen-Mitte	47.399697	8.588528
19	8052	Seebach	47.453721	8.895707
20	8053	Witikon	47.358310	8.590628

Data Set 2

- Foursquare: existing restaurant in the city

https://it.foursquare.com/explore?mode=url&near=Zurigo%2C%20Svizzera&nearGeoId=72057594040585832&q=Ristorante
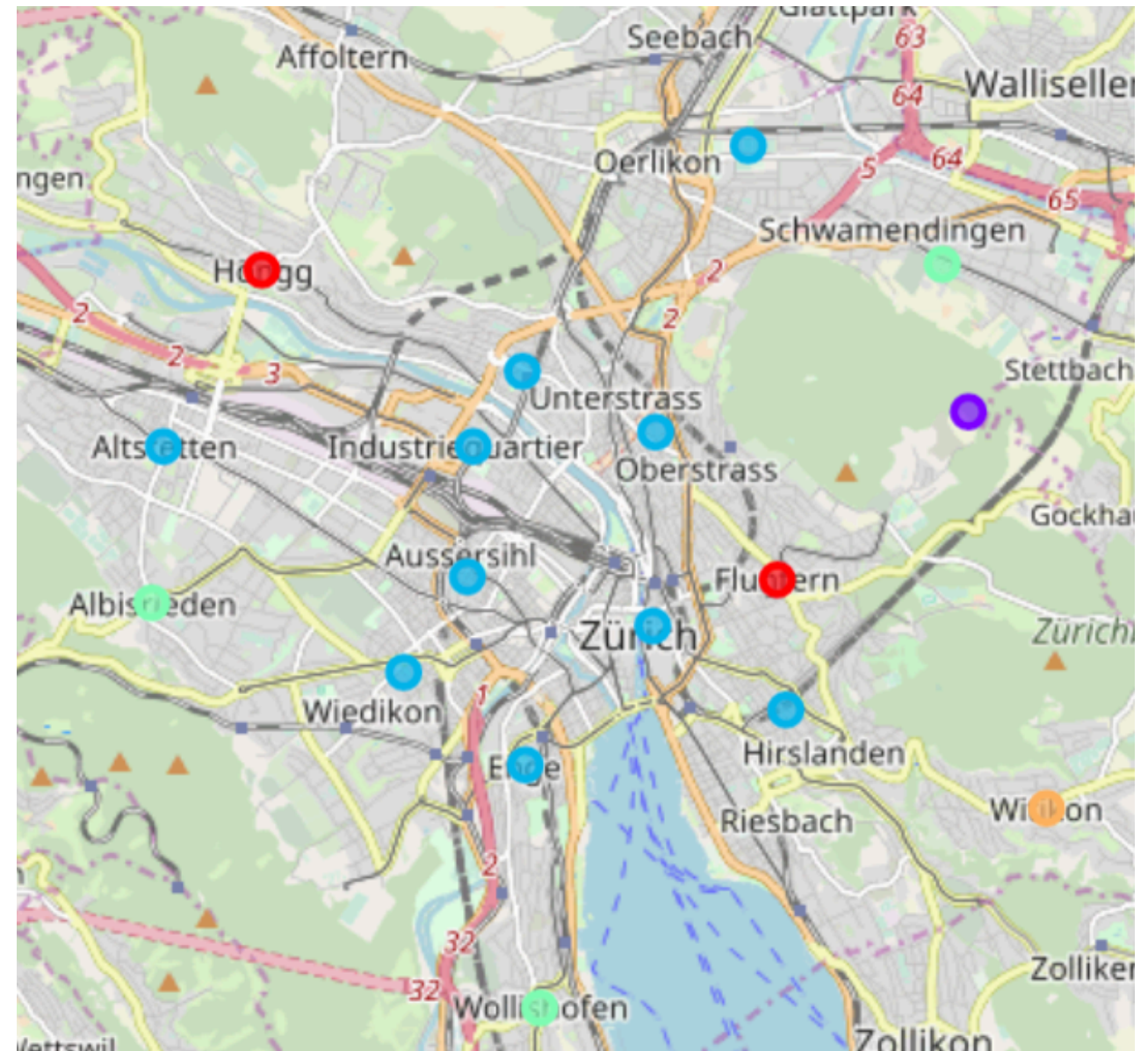
Data processing

- Neighbourhood selection: less than 5 km from city centre

- Neighbourhood grouping (merge identical ZIP codes)

- Neighbourhood classification: 10 most trending type of cuisine

	Neighborhood	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
0	City, Hochschulen, Lindenhof, Rathaus	2.0	Coffee Shop	Café	Italian Restaurant	Swiss Restaurant	Lounge
1	Enge	2.0	Italian Restaurant	Swiss Restaurant	French Restaurant	Asian Restaurant	Chinese Restaurant
2	Alt-Wiedikon, Sihlfeld	2.0	Café	Italian Restaurant	Pizza Place	Thai Restaurant	Asian Restaurant
3	Hard, Langstrasse, Werd	2.0	Café	Thai Restaurant	Restaurant	Japanese Restaurant	Bakery
4	Escher Wyss, Gewerbeschule	2.0	Restaurant	Café	Burger Joint	Ice Cream Shop	Falafel Restaurant
5	Oberstrass, Unterstrass	2.0	Italian Restaurant	Swiss Restaurant	Café	Restaurant	Thai Restaurant
7	Hirslanden, Hottingen	2.0	Italian Restaurant	Swiss Restaurant	Café	Bakery	Restaurant
8	Wipkingen	2.0	Italian Restaurant	Restaurant	Bakery	Café	Eastern European Restaurant
15	Altstetten	2.0	Restaurant	Swiss Restaurant	Bakery	Pizza Place	Chinese Restaurant
17	Oerlikon, Saatlen	2.0	Café	Italian Restaurant	Restaurant	Thai Restaurant	Swiss Restaurant

Data analysis

- k-mean clustering (k=5)

- peripheral neigbourhoods: low density of restaurant

- central neigbourhoods: high density, many competitors for Italian cuisine.

- next-to-central neigbourhoods: high density, few competitors for Italian cuisine.

Conclusion

Successful pilot-opening requires

- high demand: central neigbourhoods

- low competition: next-to-central neigbourhoods

	Neighborhood	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
9	Wollishofen	3.0	Restaurant	Café	Bakery	Chinese Restaurant	Italian Restaurant
14	Albisrieden	3.0	Swiss Restaurant	Restaurant	Italian Restaurant	Pizza Place	Breakfast Spot
18	Hirzenbach, Schwamendingen-Mitte	3.0	Restaurant	Swiss Restaurant	Fast Food Restaurant	Pizza Place	Italian Restaurant

Further study of demand and competitors will determine the best location