Quantifying the Best Spot to Start a Hip Coffee Shop in Copenhagen

IBM Data Science Capstone
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The Challenge

- Find the best neighborhood to start a coffee shop
 - Focused on age range 20 44 years of age
 - High disposable income is a plus!
 - The less competition there is the better

The Data

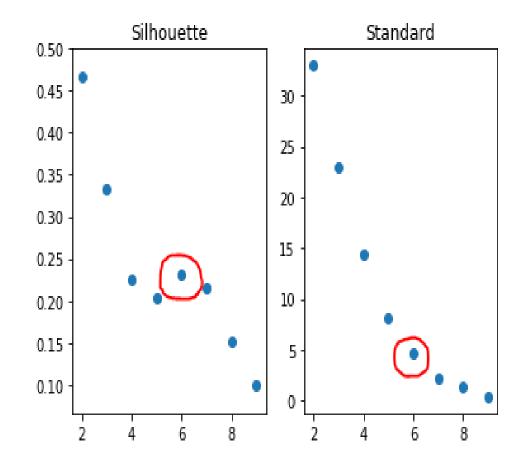
- <u>Danish Neighborhoods GeoJson:</u> Used to segregate the neighborhoods of Copenhagen
- <u>Spending Income per household:</u> To find the neighborhoods with the highest available spending money and highest growing spending money.
- <u>Population Data:</u> To explore which neighborhoods has the highest growing population of our target audience
- Bing API: To find the latitude & longitude of the center of our chosen neighborhoods
- Foursquare API: To catalog existing number of coffee shops to decide where we have the weakest competition

Tools



K Means clustering

- Iterative unsupervised algorithm.
- Groups data based on similarity!
- Elbow method and silhouette score together suggest 6 clusters



Conclusion

• Build the coffee shop in Amager Vest!

	id	area	Lat	Long	Coffee Shop	Café	Tea Room	2021	2022	popgrowth	shoppop	disposable	Labels
7	10	Amager Vest	55.64167	12.578060	1.0	1	0.0	40509.784328	42055.232397	0.038150	0.000024	459276	0
8	5	Valby	55.66629	12.514337	5.0	6	0.0	30582.955249	31545.886441	0.031486	0.000158	434942	0