VAC-Cape Town

Investigating the optimal sites for COVID-19 vaccine storage and administration

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Business Problem

3 500 000 people in the City of Cape Town need to-be vaccinated

What is the opportunity to create value by adding another vaccination administering or vaccination storage site in the City of Cape Town

Data Sourcing

Data Will Be Sourced From 3 Sources

- Publicly available data from government
- Publicly available data from Foursquare.com
- Publicly available data from other online sources

Methodology

The research will leverage of Python and Machine Learning techniques to source the data from publicly available web data and then visualized on an interactive map of Cape Town.

Any value will be communicated accordingly

Identifying shortcomings of this research and proposals on future research will be provided.

- Map of Cape Town Districts and Vaccination Sites

- Results show that vaccination sites are centred in the city centre and are not easily accessible on the outskirts of the city.
- Partnering with hotels could be an easy way to introduce new vaccination sites into the network.
- Results visualized on following slides



- Map of Cape Town Districts and Vaccination Sites

	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
0	Atlantic Seaboard	Hotel	Coffee Shop	Café	Park	Italian Restaurant	Theater	Steakhouse	African Restaurant	Gym	Market
1	Blaauwberg	Café	Seafood Restaurant	Breakfast Spot	Restaurant	Grocery Store	Beach	Burger Joint	Pizza Place	Shopping Mall	Gas Station
2	Cape Flats	Fast Food Restaurant	Rental Car Location	Airport Lounge	Grocery Store	Breakfast Spot	Coffee Shop	Seafood Restaurant	Gift Shop	Hotel	Burger Joint
3	City Centre	Hotel	Coffee Shop	Café	Steakhouse	Park	Theater	Seafood Restaurant	Brewery	Market	Italian Restaurant
4	Helderberg	Coffee Shop	Fast Food Restaurant	Convenience Store	Steakhouse	Restaurant	Shopping Mall	Seafood Restaurant	Wine Shop	Italian Restaurant	Vineyard
5	Northern Suburbs	Convenience Store	Shopping Mall	Train	Steakhouse	Fried Chicken Joint	Arts & Crafts Store	Seafood Restaurant	Train Station	Winery	Department Store
6	Seat: Cape Town	Hotel	Coffee Shop	Café	Seafood Restaurant	Park	Steakhouse	Theater	Tapas Restaurant	Hotel Bar	Ice Cream Shop
7	South Peninsula	Restaurant	Coffee Shop	Café	Steakhouse	Vineyard	Breakfast Spot	Fast Food Restaurant	Grocery Store	French Restaurant	Pizza Place
8	Southern Suburbs	Café	Coffee Shop	Pizza Place	Thai Restaurant	Burger Joint	Sushi Restaurant	Bakery	Italian Restaurant	Bar	Athletics & Sports

Shortcomings of the research

- Vaccination site is more complex than just the physical site, need to source vaccines, medical staff, equipment and so on
- Determine the average wealth in the districts to ascertain the geospatial concentration of vaccine sites

Conclusion

- There is a potentially successful opportunity to find a new vaccination site in the City of Cape Town.
- More qualitative research needs to be done to determine the exact location
- Proposal for a vaccine storage site in the city centre
- Proposal to partner with hotels for additional vaccine capacity