Recommendation of places of open a new restaurant in Canberra

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PURPOSE

EASY PROFIT

LOW COMPETITIVE PRESSURE

HIGH INCOME TARGET GROUP

DATA ACQUISITION AND CLEANING

- Source
  - Postcode data
  - Coordinate data
- Cleaning
  - Duplicate data
  - Merge two dataset – uncomplicate data
- Feature selection
  - Keep the postcode, suburb, latitude longitude for evaluation
  - Keep city, state, country as reminder of the place name and location

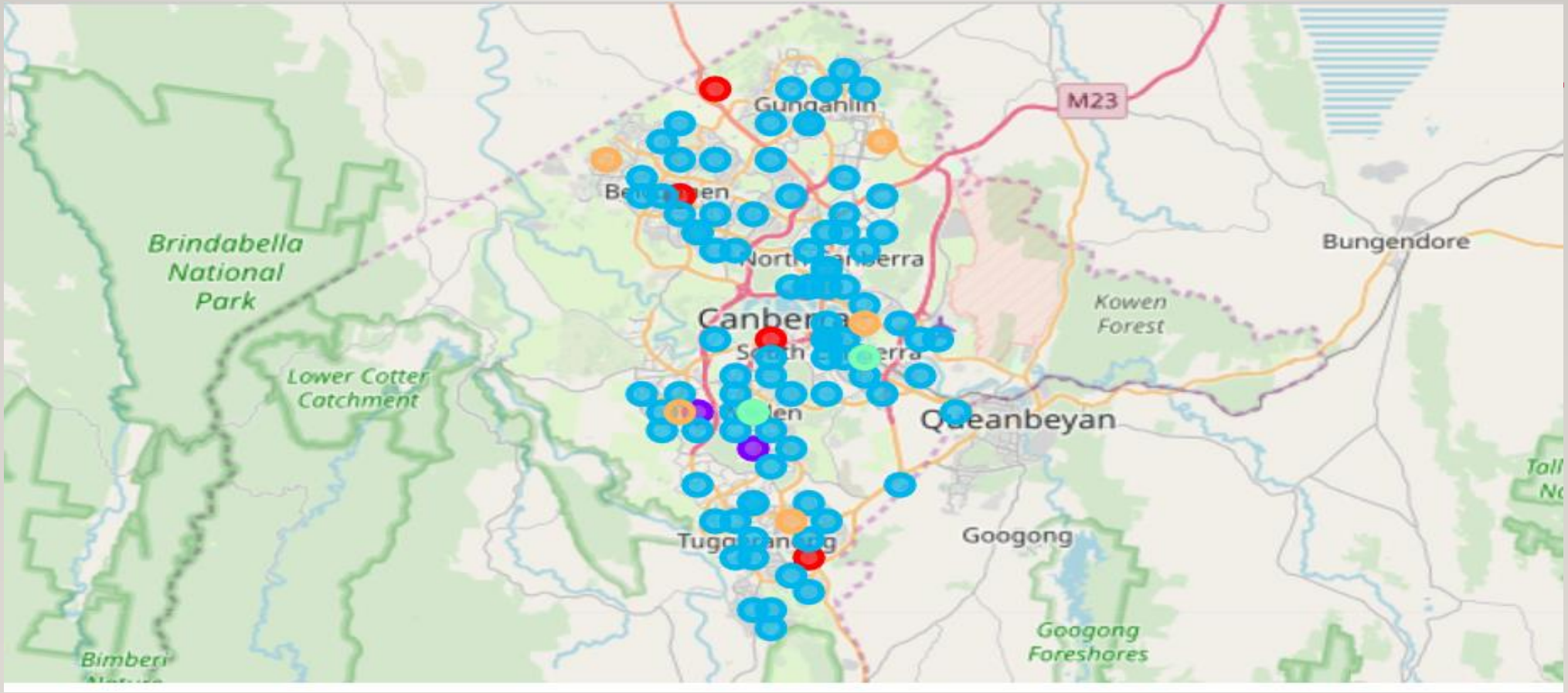
DATA ANALYSIS

- Merge and Map Canberra Suburb
  - Visualize and show the exact place of each suburb
- Venues
  - Venues represents the lifestyle and main usage of each place
  - Common Venues provides suggestions for the further development of the area
- Mapping and Evaluate Clusters
  - Mapping – better visualize understanding
  - Using venues to group the suburb – easy to category the place usage
  - New restaurant should locate in the area center, good public transport, shopping center, and large flow of people

RESULT (CLUSTER 1-5 TABLE)

	Postcode	Latitude	Longitude	Cluster Labels	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
92	2611	-35.35	149.05	4	Bar	Australian Restaurant	Optical Shop	Fast Food Restaurant	Food Truck	Food Court	Food & Drink Shop	Flower Shop	Flea Market	Fish & Chips Shop
90	2600	-35.30	149.15	4	Playground	Café	Restaurant	Park	Coffee Shop	Plaza	Farm	Flower Shop	Flea Market	Fish & Chips Shop
67	2615	-35.21	149.01	4	Pool	Bus Stop	Coffee Shop	Field	Food Truck	Food Court	Food & Drink Shop	Flower Shop	Flea Market	Fish & Chips Shop
45	2904	-35.41	149.11	4	Café	Pharmacy	Shopping Mall	Field	Winery	Fast Food Restaurant	Food & Drink Shop	Flower Shop	Flea Market	Fish & Chips Shop
51	2914	-35.20	149.16	4	Soccer Field	Park	Winery	Farm	Food & Drink Shop	Flower Shop	Flea Market	Fish & Chips Shop	Filipino Restaurant	Field

RESULT (CLUSTER MAP)



cluster 1: Red cluster 2: Purple cluster 3: Blue cluster 4: Green cluster 5: Orange

RESULT

- Cluster 1: Area center & Good public transport
- Cluster 2: More rural area
- Cluster 3: Too many places, hard to find a really good location
- Cluster 4: People live with a fast pace of life
- Cluster 5: Entertainment place

DISCUSSION

- Cluster 1: Best choice
  - Center area with public transport – many people to visit
  - Suburb name: Yarralumla, Richardson, Florey, Hall.
- Cluster 2: Rural
  - Not enough people live here
- Cluster 3: Good choice
  - Should have a deeper consideration of which location to choose
  - Too many suburb in this cluster
- Cluster 4: Fair choice
  - Fast pace of life won't have time to eat in a restaurant
- Cluster 5: Good choice
  - People go here to play, may not choose to stay and eat

CONCLUSION & FUTURE WORK

- Use more data to evaluate the population
- Give better location recommendation for different restaurant with different cusines