

Location study for new Fabia Restaurant in Melbourne

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Executive Summary

6 suburbs have very similar characteristics to Hawthorn, but 2 suburbs of the 6 that are closest to Melbourne's CBD are our preferred candidates for location consideration.

- Our location study for the second Fabia Restaurant using a Clustering approach initially considered 18 suburbs in Northern Melbourne (Australia) and narrowed it down to 6 suburbs (Moonee Ponds, Essendon, Carlton North, Fitzroy North, Northcote & Ivanhoe).
- What makes these 6 suburbs similar to Hawthorn is:
 - Higher average level of weekly family income
 - Larger presence of cafes & restaurants that offer authentic food (rather than bars and pubs)
- 2 suburbs (Carlton North and Fitzroy North) out of the 6 are located very close to Melbourne's CBD (within 4 kms) while others are further away (between 6 and 12kms from CBD) which we believe would make these two locations even more attractive (Melbourne's CBD is visited by millions of people every day).
- Our recommendation to Ernesto, the owner of Fabia Restaurant is to consider first the inner locations such as Carlton North & Fitzroy North, and then the outer locations such as Moonee Ponds, Essendon, Northcote & Ivanhoe.
- In addition to our recommendation above, choosing the right location for a restaurant should also entail other considerations such as ease and cost of acquiring local city council permits, rental costs, rental space availability, existing similar restaurants, and general population trends within each suburb.

Background & Problem Statement

The owner of Fabia Restaurant is keen to open a new restaurant in Northern Suburbs of Melbourne and wants to know about the suburbs that have similar characteristics to Hawthorn (where Fabia Restaurant is located).

- Our client owns an Italian restaurant Fabia which is located in Hawthorn (south east) in Melbourne (Australia) and is interested in opening a second restaurant in the northern suburbs of Melbourne.
- Fabia restaurant has become increasingly popular over the recent years and is well known for its authentic Italian dishes at reasonable prices and great service. Usual patrons are middle class families.
- The client is keen to open another Fabia restaurant in the Northern suburbs of Melbourne but is unsure which suburb would be the most appropriate.
- The client believes that suburbs with similar characteristics (population density, socio economic, demographic attributes as well as similar types of venues) to Hawthorn should be considered first.
- Hawthorn is one of the older and more established up-market Melbourne suburbs.

Problem Statement

- Identify suburbs (Northern Melbourne) with similar location characteristics to Hawthorn, understand what makes these suburbs similar to Hawthorn and finally make a recommendation to Ernesto which suburbs he should consider first and why with regards to opening his second restaurant.

Data Sources & Methodology

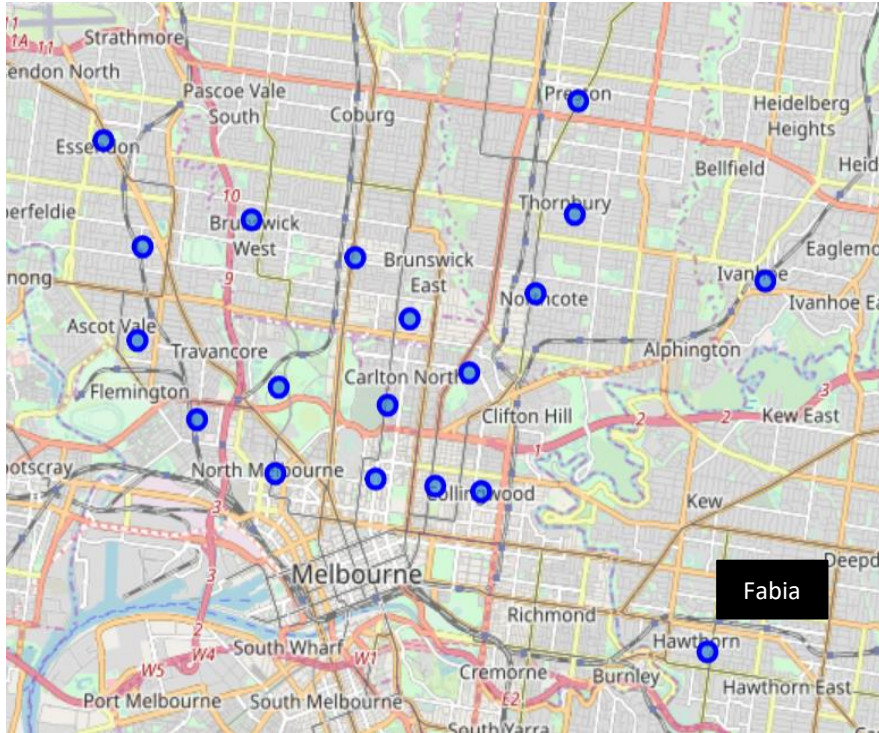
The owner of Fabia Restaurant is keen to open a new restaurant in Northern Suburbs of Melbourne and wants to know about the suburbs that have similar characteristics to Hawthorn (where Fabia Restaurant is located).

- **Postal Codes/Suburbs location data (latitude and longitude), sourced from Australia Post**
- **Socio Economic & Demographic Census 2016 data – sourced from Australian Bureau of Statistics**
 - Median age of persons living within post code
 - Median weekly family income within post code
 - Average household size within post code
- **Location and Venue Data sourced from Foursquare** (up to 100 venues within 500 meters from the latitude and longitude location of each post code)
- Analytic approach that we used is k-means clustering in order to find similarities and dissimilarities between suburbs in Melbourne. The data used to create clusters included median age of persons, median weekly family income, average household size, type of venues and their representation in each post code (proxy for suburb).
- The output of clustering was analysed, the insights and recommendations documented in this report. The final report will be discussed and provided to our client Ernesto.

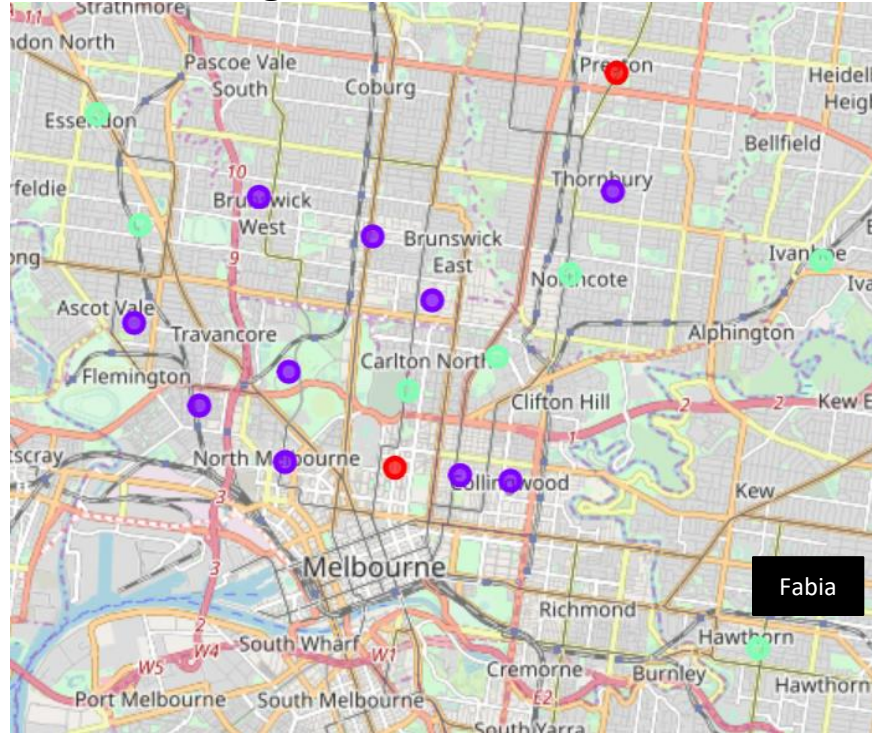
Results

Clustering provided 3 distinct clusters, primarily based on average family weekly income and types of venues located within each suburb

1. Suburbs Considered



2. Clustering Suburbs



Carlton (3053)
Preston (3072)

1

North Melbourne (3051)
Kensington (3031)
Ascot Vale (3032)
Brunswick West (3055)
Brunswick (3056)
Brunswick East (3057)
Parkville (3052)
Fitzroy (3065)
Collinwood (3066)
Thornbury (3071)

2

Moonee Ponds (3039)
Essendon (3040)
Fitzroy North (3068)
Carlton North (3054)
Northcote (3070)
Ivanhoe (3079)
Hawthorn (3122)

3

Our clustering approach defined the following clusters:

- **Cluster 1:** 2 x suburbs with lower family income (average \$1.5k per week).5
- **Cluster 2:** 10 x suburbs with medium family income (\$2.1k per week), with significant presence of cafes, bars and pubs.
- **Cluster 3:** 6 x suburbs with higher family income (\$2.5k per week), with significant presence of cafes & restaurants that offer authentic food (rather than bars and pubs). Hawthorn is identified in this cluster.

Results - Analysis of Clusters

The preferred suburbs are characterized by higher weekly family income and greater presence of authentic restaurants rather than pubs and bars.

- Weekly family income contributes significantly to clustering.
- With respect to Clusters 2 & 3, it can be observed that suburbs in Cluster 2 have significant presence of bars & pubs. Pubs are well known for offering to their patrons less authentic and less expensive food menus, in addition with their growing popularity with families (with kids) it may be very hard for Fabia Restaurant to compete on price in order to get the desired number of customer visits.
- With respect to Cluster 3 suburbs, median weekly family income is higher in Hawthorn (\$2.6k pw) than the rest of Cluster 3 (\$2.4k pw) indicating that there is a risk that the pricing of Fabia's meals may be less attractive in Cluster 3 suburbs leading potentially to less visits. However, this could be offset by the fact that average family size is bigger in Cluster 3 suburbs (2.4) compared to Hawthorn (2.2) which in turn could lead to more dollar spent per visit.
- Some suburbs in Cluster 3 are closer to CBD and some are further away. In our view the suburbs closer to Melbourne Central Business District (CBD) such as Carlton North & Fitzroy North have some advantages with respect to generating more visits (as millions of people visit Melbourne's CBD every day).
- Other considerations that should be taken into account in the location decision making process are local council regulations and fees, rental costs, rental space availability, other similar restaurants in the area & latest population trends.

Conclusion

6 suburbs have very similar characteristics to Hawthorn and are most likely candidates for consideration (for new Fabia Restaurant), furthermore 2 suburbs of the 6 are within 4kms from Melbourne's CBD which gives them further advantage.

- Our clustering approach identified three distinct clusters
 - 2 x suburbs with lower family income (average \$1.5k per week).
 - 10 x suburbs with medium family income (\$2.1k per week), with significant presence of cafes, bars and pubs.
 - 6 x suburbs with higher family income (\$2.5k per week), with significant presence of cafes & restaurants that offer authentic food (rather than bars and pubs). Please note that Hawthorn is included in this cluster.
- Analysis of clusters showed that two key features set apart Cluster 3 from other clusters: a) families in Cluster 3 on average earn more income per week and b) higher presence in Cluster 3 of more authentic restaurants (as opposed to bars and pubs).
- It should also be noted that 2 (Carlton North, Fitzroy North) of the 6 suburbs (in Cluster 3) are very close to Melbourne's CBD which makes them potentially more attractive.
- In addition to our location analysis & insights, other consideration should be given to local City Council's regulations and costs associated, cost of rental, rental space availability, other similar restaurants, latest trends within each suburb considered etc.

Appendix

Some post codes in Melbourne map to more than one suburb.

Mapping of post codes and suburbs

Post Code	Suburbs
3053	Carlton
3072	Preston
3051	North Melbourne
3055	Brunswick West
3071	Thornbury
3032	Ascot Vale, Maribyrnong, Travancore
3052	Parkville
3066	Collingwood
3056	Brunswick
3031	Kensington, Flemington
3057	Brunswick East
3065	Fitzroy
3040	Essendon, Aberfeldie, Essendon West
3070	Northcote
3039	Moonee Ponds
3079	Ivanhoe, Ivanhoe East
3054	Carlton North, Princess Hill
3122	Hawthorn
3068	Fitzroy North, Clifton Hill