



Zomato - Best of Melbourne Analysis

Dea Avega Editya

Master of BA

Muhammad Soban Qasim

Master of BA

Abhishek Sinha

Master of BA

Vinny Vu

Master of BA

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Our consultancy
add names &
add names

📞 (03) 9905 2478
✉️ questions@company.com

ABN: 12 377 614 630

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Introduction

1 Git Repository

Access the git repository for this project via the following [link](#)

2 Introduction

For this assignment we will be looking at scrapping data from Zomato, one of the largest foods aggregators in the world Zomato.com (2020b). Zomato provides information on restaurants including, price, location, reviews and more. For the purposes on our analysis we will be looking at the best of Melbourne list Zomato.com (2020a) to gain insight into some of the most popular restaurants in Melbourne.

This report will include four sections looking at:

- Is expensive food better than cheap food?
- Finding the very best restaurants in Melbourne
- Popularity of different cuisine in Melbourne
- Exploring restaurants with gluten free food in Melbourne

In this report we have used the following packages Wickham et al. (2019), Wang (2020), Zhu (2019), Xie (2020), Wickham et al. (2020), Wickham (2016), Cheng, Karambelkar, and Xie (2019), Wickham, Hester, and Francois (2018), Appelhans et al. (2020), Garnier (2018), Sievert (2020).

3 Is expensive food better than cheap food?

In this section we will be using the Zomato Best of Melbourne to explore whether expensive food is “better” than cheap food. To conduct this analysis, we will be looking at:

- What is considered cheap and expensive food
- What the breakdown of price ranges of the restaurants is
- Comparing prices and aggregate ratings
- Determining whether there is a relationship between prices and ratings

3.1 What is considered cheap and expensive food?

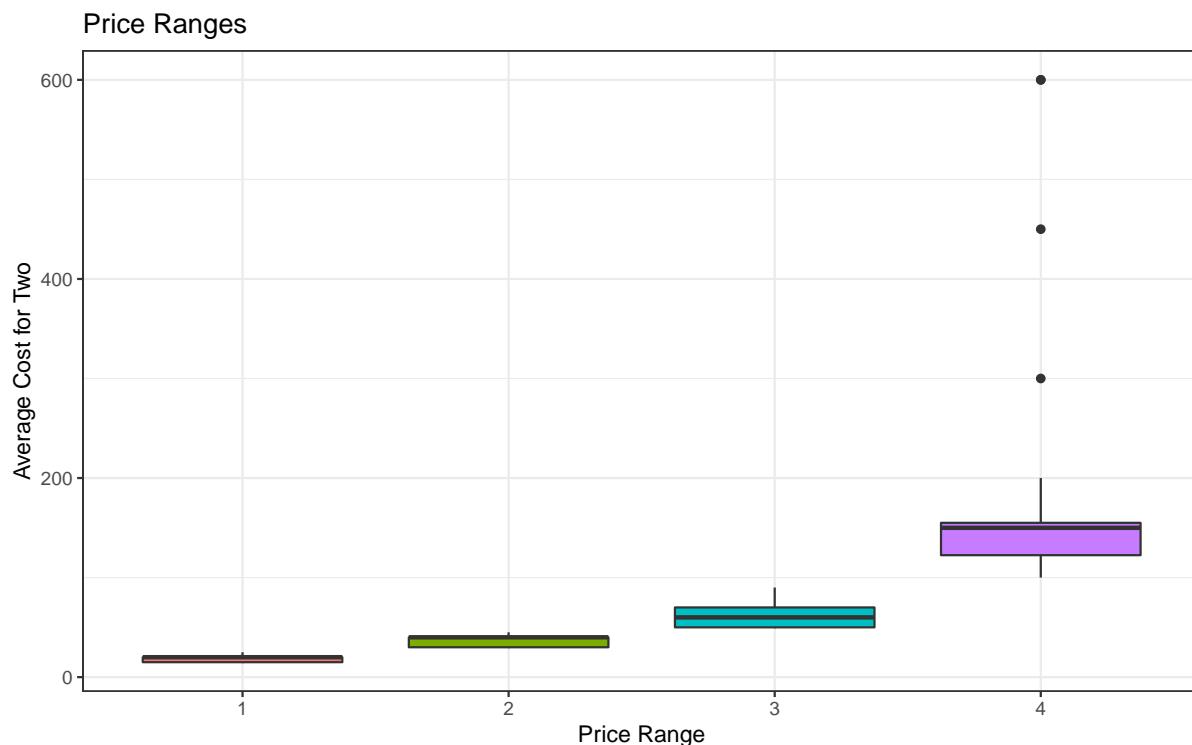


Figure 1: Price Ranges

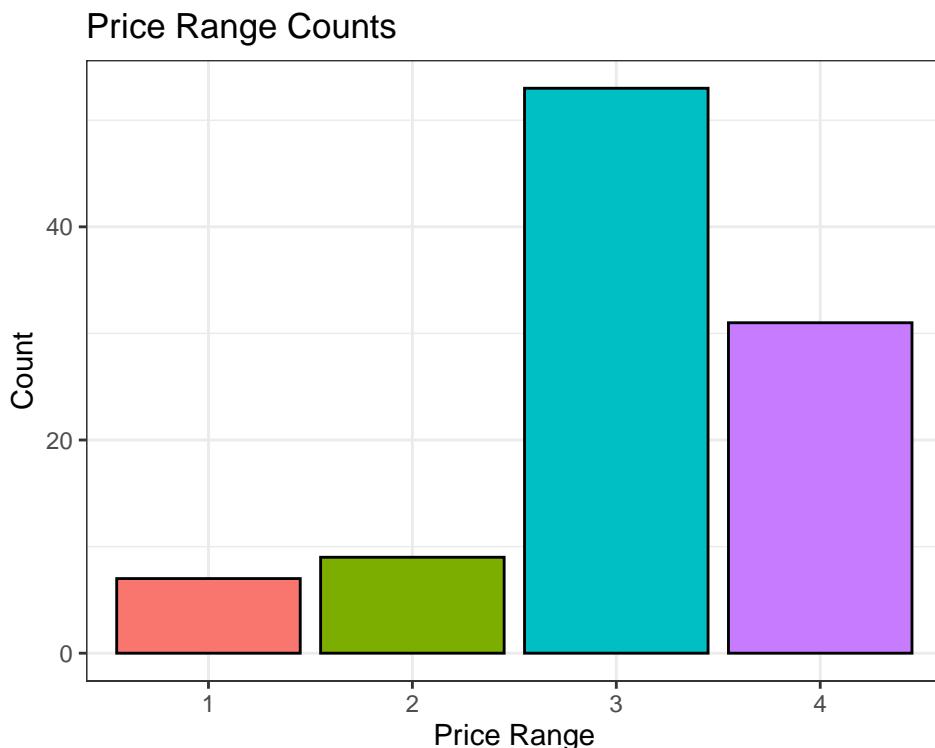
From Figure 1 we can see Zomato breaks down price ranges into 4 categories with 4 being the most expensive to 1 being the least expensive.

From Table 1 we can see the range of prices that make up each price category.

Table 1: Price Ranges

Price Range	Maximum	Median	Minimum	Range
1	25	20	15	10
2	45	40	30	15
3	90	60	50	40
4	600	150	100	500

3.2 What the breakdown of price ranges of the restaurants?

**Figure 2: Price Range Counts**

From Figure 2 We can see price range 3 has the most counts. One thing to note however is price range 3 has a range of \$40 compared to 1 and 2 which is \$10 and \$15, respectively. It may be unfair to conclude there is a higher count of more expensive food as the ranges included in the expensive ranges are larger than the lower ones.

3.3 Comparing prices and aggregate ratings

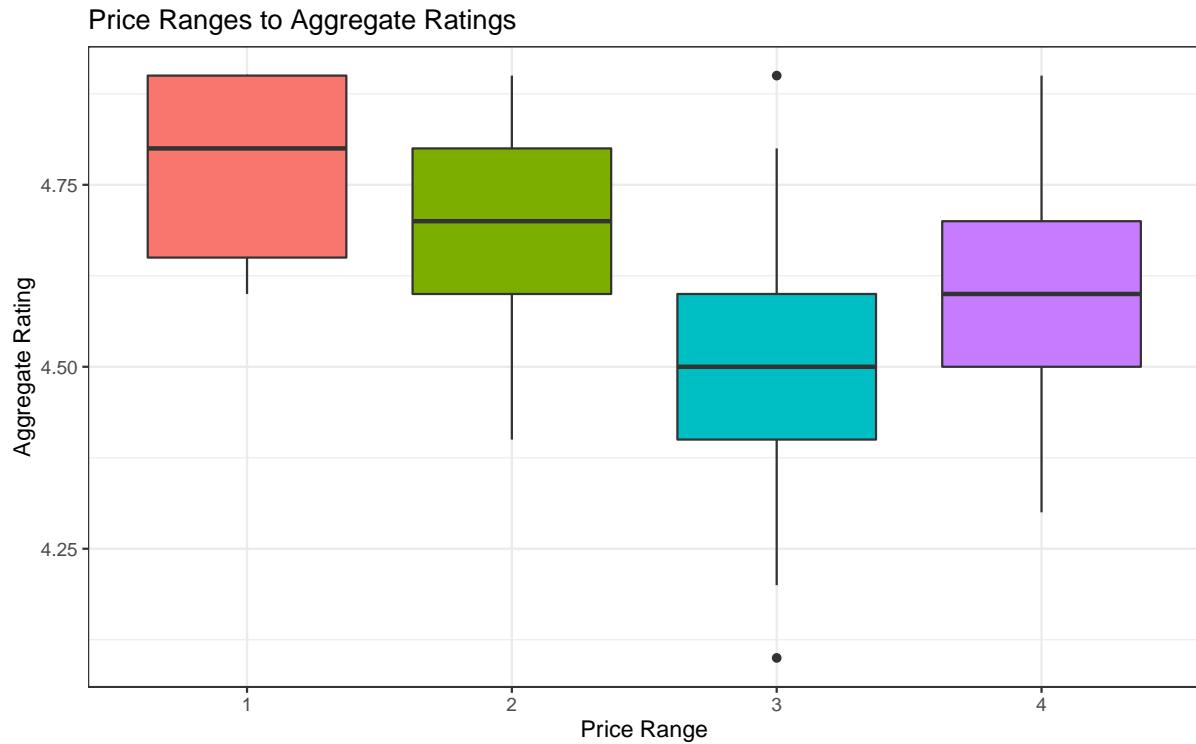


Figure 3: Price Ranges to Aggregate Ratings

From Figure 3 we can see the median aggregate rating for price range 1 is the highest. In fact, we can see a large amount of lower priced restaurants outranking higher priced restaurants in terms of aggregate ratings.

3.4 Is there a relationship between prices and ratings

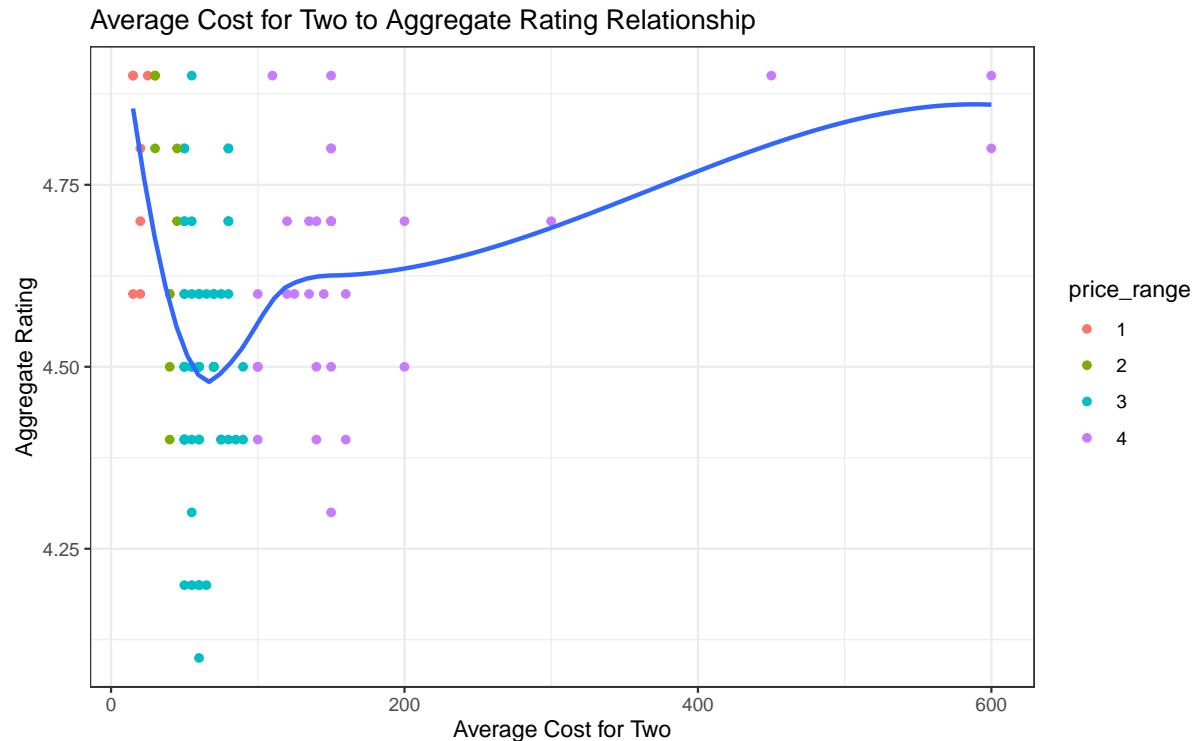


Figure 4: Average Cost for Two to Aggregate Rating Relationship

From Figure 4 we can see there is not a strong relationship between the average cost for two and the aggregate ratings suggesting there is no relationship between price and food quality. We see a slight upwards trend at the higher price levels. However, this is only based on 5 restaurants with drastically higher prices. We see most of the restaurants fall below the \$200 price point. This might even suggest lower priced restaurants out rank the higher priced restaurants due to the higher count.

```
## `summarise()` ungrouping output (override with `.`groups` argument)
```

Table 2: Rating Ranges

Rating Text	Maximum	Minimum
Excellent	4.9	4.5
Very Good	4.4	4.1

Table 2 shows range of aggregate ratings that make up each rating levels.

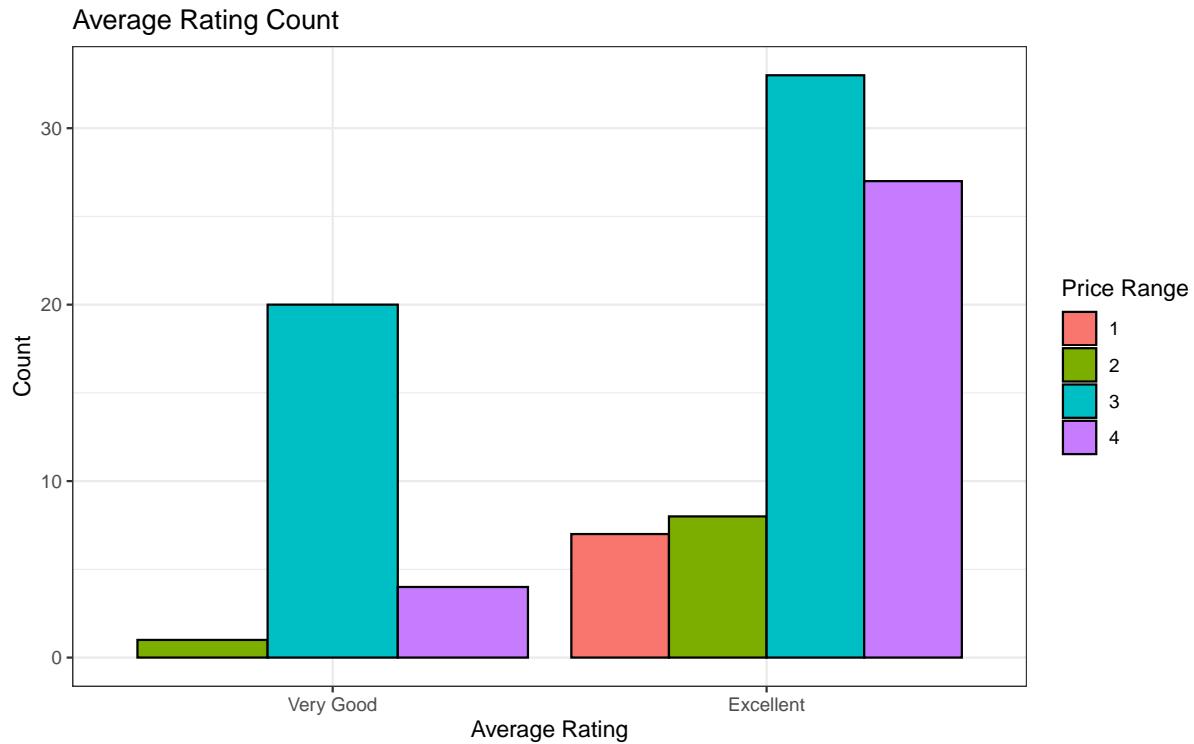


Figure 5: Average Rating Count

From Figure 5 we can see restaurants in the second and fourth price category all rank in either the very good or excellent category. 3 has the highest count in all categories, however, this may be due to the higher count. We see all price levels have restaurants with high ratings.

4 Finding The Very Best Restaurants of Melbourne

This section covers the composition and distribution of the very best restaurants in Melbourne-Victoria. In order to find the very best restaurant, this report will filter out 100 restaurants which are listed in “**Best of Melbourne**” category on Zomato’s website. The very best restaurants are described as one which has rating equals to or more than 4.8 out of 5. After filtered out the dataset, several highest-rated restaurants fill the top list as shown in table 3.

Table 3: The Very Best Restaurants in Melbourne According to Zomato Rating

name	cuisines	locality	price_for_two	rating
Tipo 00	Italian	CBD	150	4.9
Minamishima	Japanese, Sushi	Richmond	450	4.9
Dexter	American, BBQ	Preston	110	4.9
Le Petit Gateau	French, Desserts, Coffee and Tea	CBD	30	4.9
Vue de monde	Australian, Contemporary	CBD	600	4.9
Lune Croissanterie	Bakery, French	Fitzroy	25	4.9
Beatrix	Coffee and Tea, Bakery	North Melbourne	30	4.9
Agathé Pâtisserie	Bakery, Patisserie	South Melbourne Market, South Melbourne	15	4.9
Patricia Coffee Brewers	Coffee and Tea	CBD	15	4.9
Hinoki Japanese Pantry	Japanese, Sushi	Fitzroy	55	4.9
Humble Rays	Coffee and Tea, Cafe Food, Asian Fusion	Carlton	50	4.8
Rice Paper Scissors	Asian Fusion, Tapas	CBD	80	4.8
Shanklin Cafe	Modern Australian, Coffee and Tea, Cafe Food	Hawthorn	50	4.8
Bibelot	Desserts, Ice Cream, Cafe Food, Coffee and Tea	South Melbourne	30	4.8
Aka Siro	Japanese	Collingwood	80	4.8
La Belle Miette	Desserts, French, Coffee and Tea	CBD	20	4.8
Shira Nui	Sushi, Japanese	Glen Waverley	150	4.8
Attica	Australian, Contemporary	Ripponlea	600	4.8
Punch Lane	Mediterranean, Modern Australian	CBD	150	4.8
The Proud Peacock	Chinese, Thai, Vietnamese	Mount Waverley	45	4.8

From table 3 above, there are twelve restaurants which have minimum rating 4.8 out of 5 hence can be described as the very best restaurants in Melbourne. The prices, cuisines and locations in the top list vary but with some patterns that will be further explored in the following section.

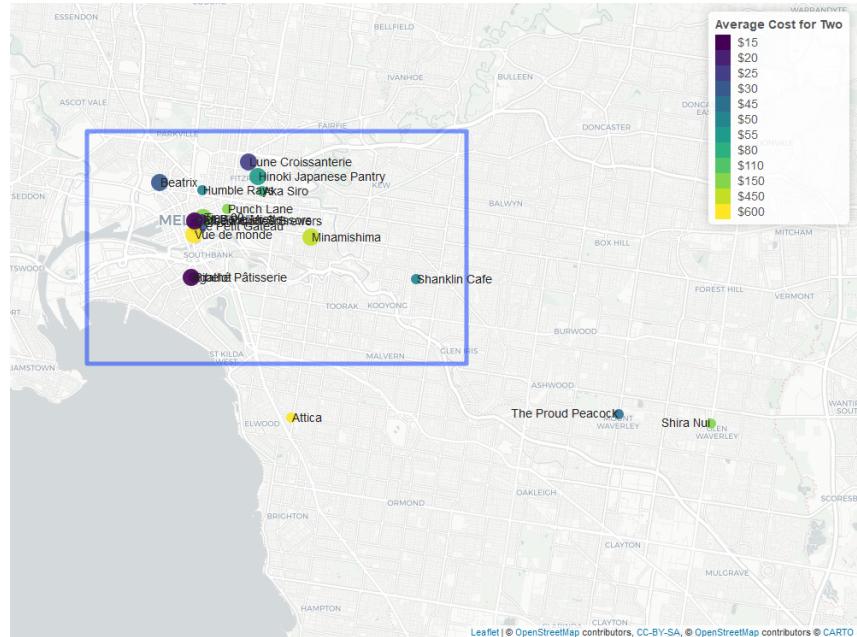


Figure 6: Best of Melbourne

Regarding the average price and location of the restaurants, figure 6 shows the map plot of these highest-rated restaurants with their attribute of average food price for two person. The average price for two persons is differentiated by color, while larger circle indicates higher rating (4.9).

It is seen from the figure 6 that three restaurants are located in CBD, which is not surprising given the nature of CBD as the epicenter of Melbourne. Other restaurants are relatively still located close to CBD like Fitzroy, North Melbourne, Carlton and Hawthorn where eight restaurants base in. One outlier from the list is Shira Nui restaurant, where its location is quite far away from other restaurants in the group. This Japanese-sushi restaurant is located in Glen Waverley suburb which is about one and half hour driving from the CBD.

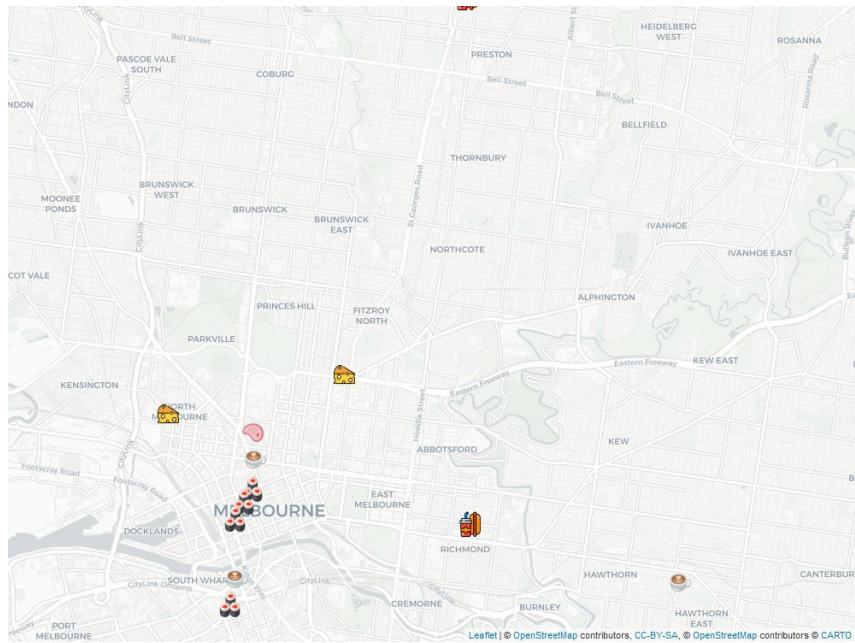


Figure 7: Sushi Restaurants are Dominating Top List

Furthermore, 4 out of 12 highest-rated restaurants in Melbourne are Japanese-Sushi Restaurants, three are coffee shops, while the rest are French and Australian food restaurants as shown by figure 7. This fact support the opinion that “Japanese food is still growing since UNESCO declared Japanese cuisine to be an Intangible Cultural Heritage in 2013” Adelstein (2017).

5 Popularity of different cuisines in Melbourne

In this section we will look at the popularity of different cuisines in Melbourne. The analysis is based on the total votes restaurants serving these cuisine have.

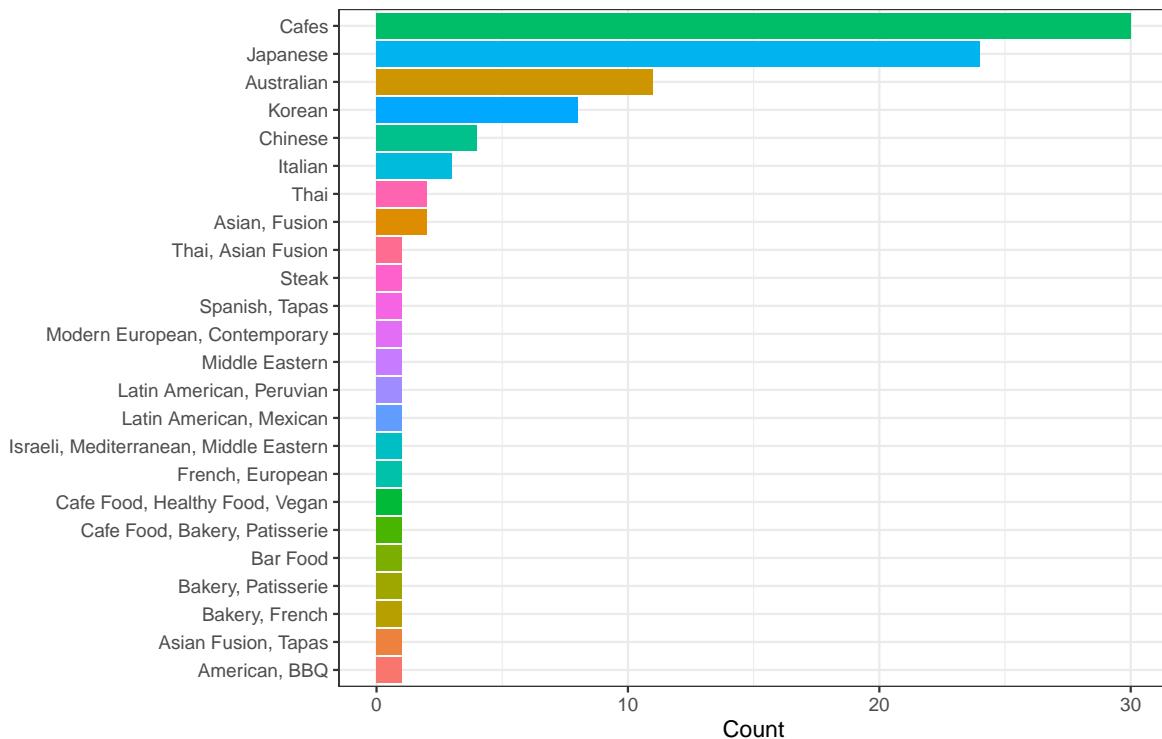


Figure 8: Number of restaurants for different Cuisines in Melbourne

From Figure 8, we can see that Japanese cuisine dominates the Melbourne CBD area, with more than 25 restaurants. Korean and Chinese cuisine are the second most popular with more than 10 restaurants serving these cuisine in the CBD Area. Also we see that CBD has lots of Cafes which can be related to the nature of the area given that CBD is a business hub with a fast pace environment. According to Dawe (2016) while many people still rely on a quick takeaway on their way to work or on a break from the office, many cafe's have transformed into restaurants and dining spaces where people can enjoy their hot beverage over a meal or even just to sit down with friends or work colleagues.

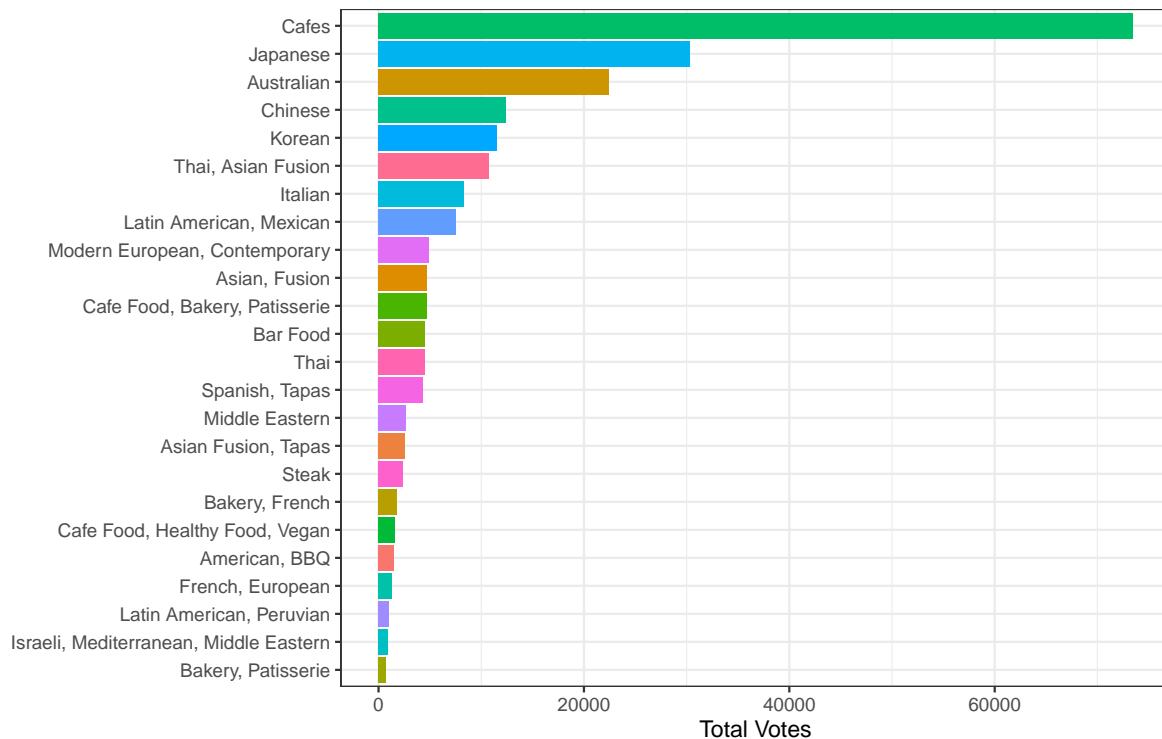


Figure 9: Number of Votes for different Cuisines in Melbourne

From Figure 9, we can look at the number of votes for different cuisine types. The popularity of a cuisine can largely be explained by the number of votes it gets. Japanese cuisine is very popular. According to Boddy (2018), ‘Chefs and restaurant owners agree diners have become more discerning and want healthy, sustainable and honest food’. The growing popularity has made Japanese restaurants a regular feature on the top restaurants list.

```
## `summarise()` regrouping output by 'name', 'locality' (override with '.groups' argument)
```

In Table 4 we can look at the top 10 popular Japanese restaurants in Melbourne along with their location and rating. ‘Don-Don’ is a very popular Japanese restaurant with 3168 votes. ‘Shira Nui’ is the highest rated restaurant with an aggregated rating of 4.8 out of 5.

Table 4: Top 10 voted Japanese restaurants in Melbourne

name	locality	aggregate_rating	Total_Votes
Hakata Gensuke Ramen Professionals	CBD	4.7	2337
Purple Peanuts Japanese Cafe	CBD	4.6	2143
Mr. Miyagi	Windsor	4.7	2024
Peko Peko	South Melbourne	4.6	1990
Sakura Kaiten Sushi	CBD	4.6	1856
Calia	Emporium Melbourne	4.5	1806
Shira Nui	Glen Waverley	4.8	1633
Shoya Nouvelle Wafu Cuisine	CBD	4.7	1514
Kisumé	CBD	4.5	1347
Shou Sumiyaki	CBD	4.4	1263

6 Exploring gluten free food/restaurants in Melbourne

In this section we will be looking at restaurants with gluten free food.

- We will explore high end restaurants which offer gluten free food.
- To look for a good restaurant we will be using aggregate ratings.
- Popular restaurants will have more than 500 reviews.
- Being realistic, calculating average cost for one person's meal.
- Most Instagramable place.

6.1 Making an easy to understand table!

The Table 5 shows the name of the restaurants in Melbourne, their locality, number of reviews received, aggregate ratings, photo count and how much it costs for one persons gluten free meal on average.

6.2 Visualizing findings!

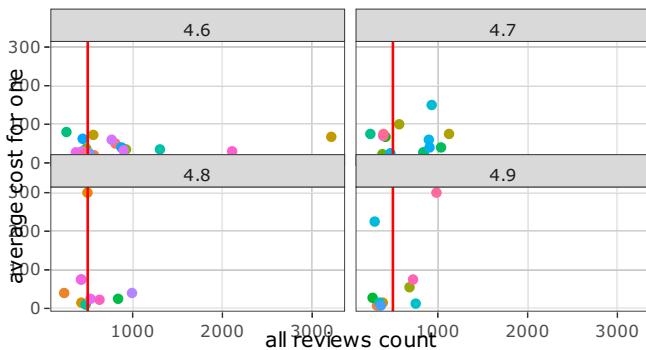


Figure 10: Worth the money!

Table 5: Top Options

name	avg_cost_for_one	all_reviews_count	photo_count	locality	aggreg
Jinda Thai Restaurant	40.0	1036	2478	Abbotsford	4.7
Mr Hendricks Cafe	25.0	472	1063	Balwyn	4.7
Humble Rays	25.0	838	2566	Carlton	4.8
Vertue Coffee Roasters	25.0	466	1427	Carlton	4.6
DOC Pizza & Mozzarella Bar - Carlton	35.0	926	763	Carlton	4.6
The Hardware Societe	30.0	2108	4229	CBD	4.6
Rice Paper Scissors	40.0	993	2891	CBD	4.8
Chin Chin	67.5	3212	3270	CBD	4.6
Tipo 00	75.0	724	2129	CBD	4.9
Dodee Paidang	37.5	483	1007	CBD	4.6
San Telmo	60.0	767	1208	CBD	4.6
MoVida Bar De Tapas	60.0	900	1160	CBD	4.7
+39 Pizzeria	50.0	809	1185	CBD	4.6
Shoya Nouvelle Wafu Cuisine	70.0	392	1323	CBD	4.7
Cumulus Inc.	75.0	1125	1288	CBD	4.7
Le Petit Gateau	15.0	352	519	CBD	4.9
Sakura Kaiten Sushi	30.0	437	1111	CBD	4.6
Hakata Gensuke Ramen Professionals	25.0	845	1189	CBD	4.7
Vue de monde	300.0	985	2755	CBD	4.9
Wonderbao	10.0	773	773	CBD	4.6
Brother Baba Budan	7.5	545	446	CBD	4.6
Little Rogue	10.0	335	671	CBD	4.7
Purple Peanuts Japanese Cafe	20.0	490	661	CBD	4.6
Patricia Coffee Brewers	7.5	365	292	CBD	4.9
Shimbashi Soba & Sake Bar	27.5	368	923	CBD	4.6
Maha Restaurant	150.0	932	1240	CBD	4.7
La Belle Miette	10.0	477	427	CBD	4.8
Coda	72.5	562	704	CBD	4.6
Punch Lane	75.0	430	862	CBD	4.8
Pastuso	62.5	444	1048	CBD	4.6
Aka Siro	40.0	238	491	Collingwood	4.8
Kenzan Japanese	80.0	263	594	Collins Place	4.6
Addict Food & Coffee	20.0	570	1350	Fitzroy	4.6
Naked For Satan	40.0	875	885	Fitzroy	4.6
Lune Croissanterie	12.5	754	1831	Fitzroy	4.9
Faraday's Cage	22.5	383	1097	Fitzroy	4.7
Cutler & Co	100.0	570	988	Fitzroy	4.7
Hell of the North	67.5	418	851	Fitzroy	4.7
Hinoki Japanese Pantry	27.5	274	383	Fitzroy	4.9
Laksa King	35.0	1304	1233	Flemington	4.6
Shira Nui	75.0	424	754	Glen Waverley	4.8
Shanklin Cafe	25.0	531	1246	Hawthorn	4.8
The Proud Peacock	22.5	631	481	Mount Waverley	4.8
Beatrix	15.0	388	645	North Melbourne	4.9
Dexter	55.0	685	1498	Preston	4.9
Serotonin Eatery	32.5	900	1897	Richmond	4.6
Minamishima	225.0	297	1435	Richmond	4.9
Attica	300.0	497	1852	Ripponlea	4.8
Komeyui	75.0	249	1316	South Melbourne	4.7
Peko Peko	25.0	517	828	South Melbourne	4.6
Bibelot	15.0	429	1437	South Melbourne	4.8
Agathé Pâtisserie	7.5	322	634	South Melbourne Market, South Melbourne	4.9
Wagyu Ya	75.0	395	1625	South Yarra	4.7
Mr. Miyagi	40.0	908	2311	Windsor	4.7
Journeyman	27.5	839	1535	Windsor	4.7

The graph Figure 10 shows top restaurants in Melbourne, using the category “gluten free”, with an intercept at 500 reviews count. In the highest rating of 4.9, Lune Croissanterie is the best restaurant

with very reasonable average price of 12.50 AUD per person. While, Vue de monde is second on the list with a rating of 4.8 but very pricy at an average cost of 300 AUD.

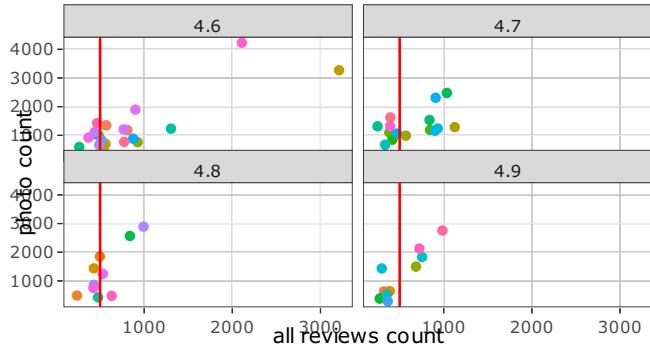


Figure 11: *Can I instagram it?*

The graph Figure 11 visualizes photo count against review counts for each restaurants potentially highlighting how “instagrammable” a potential restaurant is. Lune Croissanterie has the best review rating with a high photo count of 1813. While, The Hardware Societe has the highest photo count at 4224, with a good rating of 4.6.

7 Conclusion

- From this analysis we find there is no real relationship between restaurant prices and quality suggesting expensive food is not better than cheap.
- Melbourne has a strong multicultural cuisines options for people to choose from. Japanese being the most popular having the highest count of restaurants. Popularity of Cafes are also high.
- Most of the very best restaurants in Melbourne is located near CBD.
- Melbourne has quite a few good restaurants that serve gluten free food with a high review count. Most of the same restaurants have a high photo count suggesting they are also “instagramable”

References

- Adelstein, J (2017). *The Japanese Food Boom Shows No Sign Of Slowing Down*. <https://www.forbes.com/sites/adelsteinjake/2017/10/02/the-japanese-food-boom-shows-no-sign-of-slowing-down/> (%7B%5C#%7D434503db2118) (visited on 06/12/2020).
- Appelhans, T, F Detsch, C Reudenbach, and S Woellauer (2020). *mapview: Interactive Viewing of Spatial Data in R*. R package version 2.7.8. <https://CRAN.R-project.org/package=mapview>.
- Boddy, N (2018). Australia's top restaurants: why we love Japanese food and restaurants.
- Cheng, J, B Karambelkar, and Y Xie (2019). *leaflet: Create Interactive Web Maps with the JavaScript 'Leaflet' Library*. R package version 2.0.3. <https://CRAN.R-project.org/package=leaflet>.
- Dawe, J (2016). Grinding the Numbers – Melbourne's growing coffee loves.
- Garnier, S (2018). *viridis: Default Color Maps from 'matplotlib'*. R package version 0.5.1. <https://CRAN.R-project.org/package=viridis>.
- Sievert, C (2020). *Interactive Web-Based Data Visualization with R, plotly, and shiny*. Chapman and Hall/CRC. <https://plotly-r.com>.
- Wang, E (2020). *romato: API to Zomato*. R package version 0.1.0.
- Wickham, H (2016). *ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. <https://ggplot2.tidyverse.org>.
- Wickham, H, M Averick, J Bryan, W Chang, LD McGowan, R François, G Grolemund, A Hayes, L Henry, J Hester, M Kuhn, TL Pedersen, E Miller, SM Bache, K Müller, J Ooms, D Robinson, DP Seidel, V Spinu, K Takahashi, D Vaughan, C Wilke, K Woo, and H Yutani (2019). Welcome to the tidyverse. *Journal of Open Source Software* 4(43), 1686.
- Wickham, H, R François, L Henry, and K Müller (2020). *dplyr: A Grammar of Data Manipulation*. R package version 1.0.0. <https://CRAN.R-project.org/package=dplyr>.
- Wickham, H, J Hester, and R Francois (2018). *readr: Read Rectangular Text Data*. R package version 1.3.1. <https://CRAN.R-project.org/package=readr>.
- Xie, Y (2020). *knitr: A General-Purpose Package for Dynamic Report Generation in R*. R package version 1.28. <https://yihui.org/knitr/>.
- Zhu, H (2019). *kableExtra: Construct Complex Table with 'kable' and Pipe Syntax*. R package version 1.1.0. <https://CRAN.R-project.org/package=kableExtra>.
- Zomato.com (2020a). *Best of Melbourne*. <https://www.zomato.com/melbourne/great-food-no-bull>.
- Zomato.com (2020b). *Shaping the future of food*. <https://www.zomato.com/about>.