Restaurant Opportunity Analysis:
An exploration of trend forecasting in Regional NSW

Introduction

Australia has always been a country that has been prized for it's success in balancing it's lifestyle values with opportunities for economic growth, both on the individual level and as a collective. As the major business hubs - Sydney and Melbourne being the most prominent examples - continue to grow and inflate at a fairly rapid rate, more and more the public are looking at opportunities in Regional areas. As people rush to these areas, so to do their tastes and lifestyle expectations grow and evolve and so opportunities arrive for forward thinking individuals to capitalise. The question is; is there a way of trying to understand what gaps may arise, by using current trends in metropolitan areas.

Restaurants and other Food & Beverage ventures have become a very popular type of investment. As immigration has always played a huge part in shaping Australia's young identity, so too has the public always been interested in exploring the cuisine of other cultures.

So if it's assumed that regional areas of NSW and VIC are tipped as some of the fasting growing areas in Australia, and the world, being able to predict what Food & Beverage trends will become popular in the coming years would be an incredible tool for those looking to make that kind of an investment.

As this is a question with potentially infinite scope, for the sake of clarity we are going to focus on current trends in Sydney and compare them to the fasting growing coastal towns/cities in regional NSW.

Data

To answer this question we will be looking at two main types of data:

2.0 Food & Beverage Trends in Sydney will be important for understanding current trends, and these will be then be compared to the chosen regional areas. Rather than looking at Sydney as a whole, we are going to identify the most popular dining neighbourhoods, and then using the *Foursquare Places* API to mine for the relevant data. *Foursquare* will then be used in the same fashion to discover what current F&B businesses are operating to the chosen regional areas.

2.1 Population Census data will be collected from blog.id.com.au to determine which regional areas are currently experiencing the fastest population growth.

Methodology & Data Exploration

3.0.0 Sydney's Trendiest dining districts include Crown Street - Surry Hills, King Street - Newtown, Church Street - Parramatta, Balmain - Inner West and Cronulla - Sutherland Shire.

|	Suburb	Latitude	Longitude
0	Surry Hills	-33.886111	151.2135
1	Newtown	-33.897800	151.1785
2	Parramatta	-33.813600	151.0034
3	Balmain	-33.858900	151.1791
4	Cronulla	-34.057400	151.1522

These areas should also provide a nice cross section across a range of demographics so not to obtain bias data. The Foursquare API returns a maximum of 50 venue results. To ensure we don't waste the API calls by cluttering our results with less relevant information we will search with the *Catagory ID* query '4d4b7105d754a06374d81259' so to only return results relating to F&B related venues.

3.0.1 Venue Search #1 was collected for all 5 districts and collated into a complete dataframe. The search and collection proved successful the unique venue (or 'Catagory') types were calculated and sorted to help give the data mining process more clarity. While it did provide some useful initial insights, more data was required to identify a clearer pattern. 6 more districts were added to the search in Manly, Bondi, Glebe, Crows Nest, Randwick and Penrith.

3.0.2 Venue Search #2 returned more valuable insights and a clearer pattern was starting to emerge. What became immediately clear was that Cafe's were by and large and most popular F&B business, and while this trend was clearly driven by demand, it seemed as though this was a fairly saturated and therefore competitive section of the market to focus on. It made sense to focus on offerings that had more of a food driven offering, as Cafes and Bars as a venue type were fairly inconclusive and not going to provide any valuable insights. Cafes, Coffee Shops, Bars and Pubs were dropped into a separate database in case it were determined useful further down the track.

	Category	Count
0	Café	127
1	Coffee Shop	28
2	Thai Restaurant	20
3	Japanese Restaurant	19
4	Bakery	18
5	Italian Restaurant	18
6	Pizza Place	17
7	Australian Restaurant	15
8	Burger Joint	14

3.0.3 Further Cleaning and Exploration on the dataset provided some valuable insights.
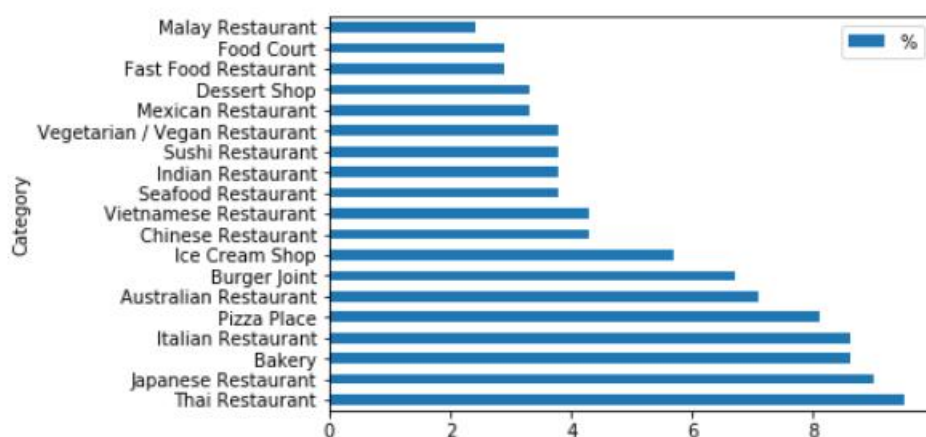
After sorting the categories and slicing the top 20 results, we were able to determine the top trending restaurants across the 11 dining districts in Sydney. These were all given a percentage value to more easily determine the size of their market value when compared against the rest of the group.

3.1.0 The Fasting Growing Coastal Areas of Regional NSW were identified using population census data from blog.id.com.au as Bowral - Mittagong, Port Macquarie, Nowra - Bomaderry, Wooloogong, Coffs Harbour and Nelson Bay.

	Area	Population	5y Increase	Lat	Lng
0	Bowral – Mittagong	40,411	0.081	-34.4792	150.4181
1	Port Macquarie	48,723	0.077	-31.4333	152.9000
2	Nowra – Bomaderry	37,838	0.061	-34.8833	150.6000
3	Wollongong	306,034	0.059	-34.4278	150.8931
4	Coffs Harbour	72,541	0.058	-30.2986	153.1094
5	Nelson Bay	28,276	0.052	-32.7150	152.1511

3.2.1 Once the **Regional Search** was complete, it was possible to make a comparisons between the trending venues in Sydney and the existing F&B businesses in the selected areas. Each area was search and then compiled into a Master Dataframe so comparison across all areas could be done easily and affectively.

	Category	Count	%	Category_BOW	Count_BOW	Category_PMQ	Count_PMQ	Category_NOW	Count_NOW	Category_WOO	Count_WOO	Category_COF	Count_COF	Category_BAY	Count_BAY
0	Thai Restaurant	20.0	9.5	Coffee Shop	4	Bakery	6	Fast Food Restaurant	5	Bakery	3	Coffee Shop	5	Bakery	3
1	Japanese Restaurant	19.0	9.0	Bakery	3	Restaurant	3	Bakery	3	Pizza Place	3	Thai Restaurant	3	Pizza Place	3
2	Bakery	18.0	8.6	Pizza Place	3	Coffee Shop	3	Sushi Restaurant	2	Australian Restaurant	2	Australian Restaurant	3	Australian Restaurant	2
3	Italian Restaurant	18.0	8.6	Australian Restaurant	2	Seafood Restaurant	3	Restaurant	2	Chinese Restaurant	2	Juice Bar	2	Chinese Restaurant	2
4	Pizza Place	17.0	8.1	Chinese Restaurant	2	Thai Restaurant	2	Pizza Place	2	Thai Restaurant	2	Japanese Restaurant	2	Thai Restaurant	2
5	Australian Restaurant	15.0	7.1	Thai Restaurant	2	Fast Food Restaurant	2	Noodle House	2	French Restaurant	2	Fast Food Restaurant	2	French Restaurant	2
6	Burger Joint	14.0	6.7	French Restaurant	2	Tea Room	1	Thai Restaurant	2	Italian Restaurant	2	African Restaurant	2	Italian Restaurant	2
7	Ice Cream Shop	12.0	5.7	Italian Restaurant	2	Sushi Restaurant	1	Coffee Shop	2	Japanese Restaurant	1	Chinese Restaurant	2	Japanese Restaurant	1
8	Chinese Restaurant	9.0	4.3	Japanese Restaurant	1	Steakhouse	1	Chinese Restaurant	2	Vegetarian / Vegan Restaurant	1	Cocktail Bar	1	Vegetarian / Vegan Restaurant	1
9	Vietnamese Restaurant	9.0	4.3	Vegetarian / Vegan Restaurant	1	Sports Bar	1	Food	1	Tapas Restaurant	1	Lebanese Restaurant	1	Tapas Restaurant	1

Results

4.0 the **Least Frequent** trending restaurants in regional NSW areas include; Vietnamese (0), Mexican (0), Malay (0), Burger Joint (1) and Vegan/Vegetarian (3).

4.1 the **Most Frequent** restaurants in regional NSW include; Bakery (19), Thai (13), Pizza (13), Fast Food (13), Chinese (10), Australian (9).

4.2 the **3 Fastest Growing** regions of Bowral, Port Macquarie and Nowra also have significantly less populations that position 4 of Wooloogong and 5 of Coffs Harbour.

Useful Insights

5.0 Vegan/Vegetarian Restaurants look like a very sound investment for investors looking for opportunities in regional NSW. Currently sitting well in the current trend list an owning just under 4% share but only 3 restaurants operating across all 6 fast growing regional areas. It reassuring to know that it's not completely untested in these areas, though the numbers are still low enough that it presents a gap in the market and also means there is potential real data to collect about their experience so far.

5.1 Burger Joints present a similar pattern to Vegan/Vegetarian Restaurants - an potentially a even more favourable prospect given that it sits higher with 6.7% of the trend share - however the findings a inconclusive and further investigation is needed. Fast Food restaurants seemed like it was a fairly saturated market in regional areas and it would first need to be determined if there is some cross over here because it could be decided if it were a sound investment - or perhaps what specifically defines a 'Burger Joint' when compared to a more general 'Fast Food' restaurant.

5.2 Vietnamese/Malay restaurants while both registering as trending restaurants in Sydney, currently have no existing competition in the regional areas that we are focused on. While this should create interest from investors, it should also be asked why that is? Is there something about these areas, population demographics perhaps, that would effect the success of these kinds of businesses? Are there concerns about supply chains? Or is it simply too new a concept for it to be successful in this kind of area?

5.3 Bakeries, Thai, Pizza and Chinese while all presenting quite high on the trending list, also appear too saturated in regional areas to present an interesting opportunity. If one were still compelled to open a business of this kind, expect plenty of competition.

5.4 Bonus Insight - Consider that Japanese style cuisine features quite heavily in the trending list (Japanese, Sushi, Ramen) with a collected percentage of 15.2%. and 13 total restaurants in regional areas. Compare this to Italian and Pizza restaurants having a similar share of the trending restaurants with a percentage of 16.7%, but 18 total restaurants in regional NSW areas.

Conclusion

This study presents itself as a great tool for anyone looking for Food & Beverage related business opportunities in the fasting growing coastal regions of regional NSW; however it by no means presents the whole picture. This acts as a guide as to where potential gaps exist, in these fast growing regions, and invites those who are interested to do further study related to property/commercial rent prices, population demographics and perhaps even more detailed studies around the existing successful businesses in the areas of interest.

It should also be considered that there is a large disparity in population size between the first 3 regions of Bowral, Port Macquarie and Nowra, when compared with Wooloogong with a population of over 300k. This coupled with it's geographical proximity to Sydney, means that it is more likely than the other regions studied in the report to mimic the trends seen in Sydney. This should be taken into consideration when choosing the more ideal areas for an investment of this kind.