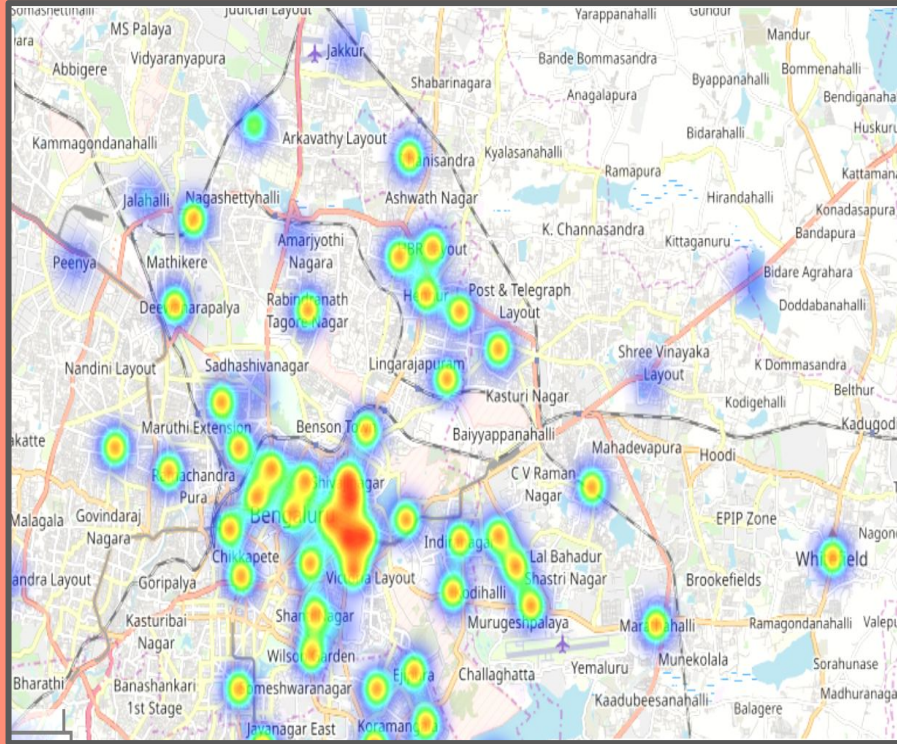


Overview



Data Source:

<https://www.kaggle.com/himanshupoddar/zomato-bangalore-restaurants>

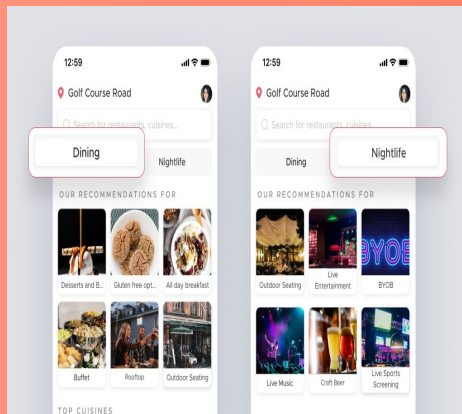
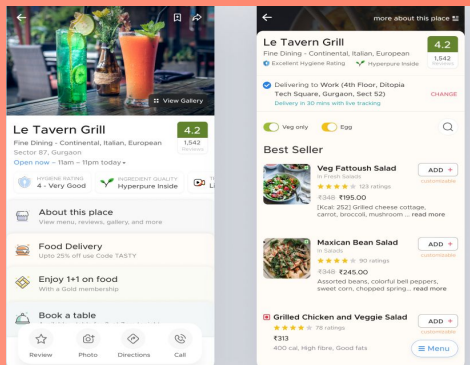
Bangalore is the Silicon Valley of India.

Delivery, Dine-out, Pubs, Bars, Drinks, Buffet, Desserts you name it and Bengaluru has it.

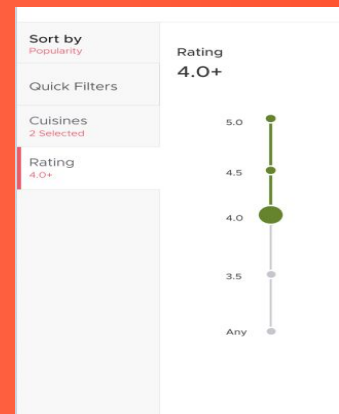
Bengaluru is best place for foodies. The number of restaurant are increasing day by day. Currently which stands at approximately 12,000 restaurants.

This Zomato data aims at analysing demography of the location. Most importantly it will help food entrepreneurs in deciding their theme, menus, cuisine, cost etc for a particular location.

Data Description



- **url** : contains the url of the restaurant in the zomato website
- **address** : contains the address of the restaurant in Bengaluru
- **name** :contains the name of the restaurant
- **Online_order** : whether online ordering is available in the restaurant or not
- **Book_table** : table book option available or not
- **rate** contains the overall rating of the restaurant out of 5
- **Votes** : contains total number of rating for the restaurant as of the above mentioned date
- **phone** : contains the phone number of the restaurant
- **location** :contains the neighborhood in which the restaurant is located
- **rest_type** :restaurant type
- **Dish_liked** : dishes people liked in the restaurant
- **cuisines** food : styles, separated by comma
- **approx_cost(for two people)** : contains the approximate cost for meal for two people
- **reviews_list** : list of tuples containing reviews for the restaurant, each tuple
- **menu_item** : contains list of menus available in the restaurant
- **listed_in(type)** :type of meal
- **listed_in(city)** : contains the neighborhood in which the restaurant is listed



Data Cleaning

url	address	name	online_order	book_table	rate	votes	phone	location	rest_type	dish_liked	cuisines	approx_cost(for two people)	reviews_list	menu_item	listed_in(type)	listed_in(city)
https://www.zomato.com/bangalore/jalsa-banasha...	942, 21st Main Road, 2nd Stage, Banashankari, ...	Jalsa	Yes	Yes	4.1/5	775	080 42297555\n\n91 9743772233	Banashankari	Casual Dining	Pasta, Lunch Buffet, Masala Papad, Paneer Laja...	North Indian, Mughlai, Chinese	800	[("Rated 4.0', 'RATED'in A beautiful place to ...	[]	Buffet	Banashankari
https://www.zomato.com/bangalore/spice-elephan...	2nd Floor, 80 Feet Road, Near Big Bazaar, 6th ...	Spice Elephant	Yes	No	4.1/5	787	080 41714161	Banashankari	Casual Dining	Momos, Lunch Buffet, Chocolate Nirvana, Thai G...	Chinese, North Indian, Thai	800	[("Rated 4.0', 'RATED'in Had been here for din...	[]	Buffet	Banashankari

Approx_Cost_FOR_2 has a high cardinality: 71 distinct values

Contact has 1208 (2.3%) missing values

Contact has a high cardinality: 14927 distinct values

Cuisine has a high cardinality: 2724 distinct values

Location has a high cardinality: 94 distinct values

Menu has a high cardinality: 9098 distinct values

Most_Liked_Dishes has 28078 (54.3%) missing values

Most_Liked_Dishes has a high cardinality: 5272 distinct values

Rating has 7775 (15.0%) missing values

Rating has a high cardinality: 65 distinct values

Restaurant_Address has a high cardinality: 11495 distinct values

Restaurant_Name has a high cardinality: 8792 distinct values

Data Cleaning Summary

- Renaming the columns.
- Deleting redundant columns.
- Replacing Gibberish Symbols ((@,Â)).
- Changing the Data Types for Analysis
- Dropping duplicates.
- Converting Strings to Bool .
- Cleaning individual columns.

Cuisine has a high cardinality: 1769 distinct values

Location has a high cardinality: 92 distinct values

Rating has 2259 (5.2%) zeros

Restaurant_Name has a high cardinality: 7112 distinct values

Reviews has a high cardinality: 21575 distinct values

Type_of_Restaurant has a high cardinality: 66 distinct values

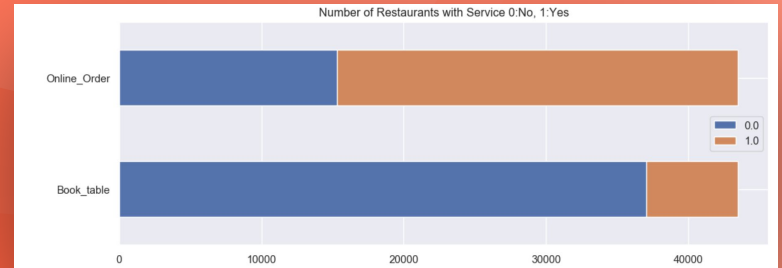
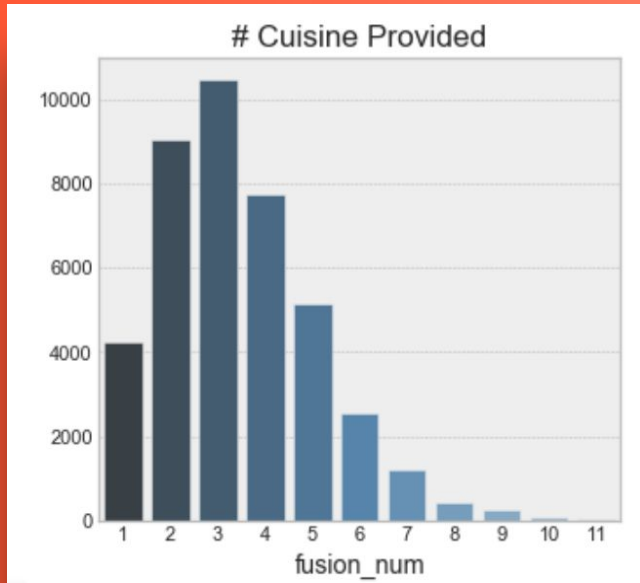
Votes has 2278 (5.2%) zeros

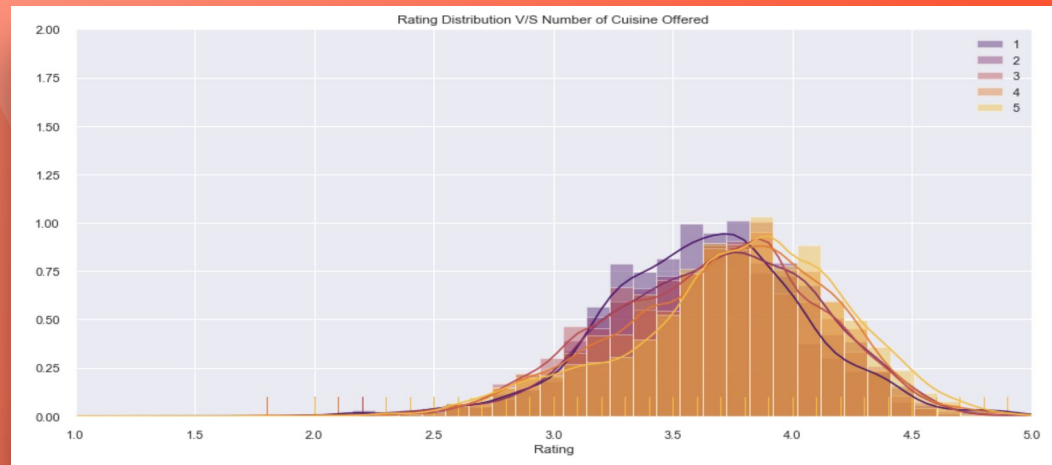
Restaurant_Name	Online_Order	Book_table	Rating	Votes	Location	Type_of_Restaurant	Cuisine	Approx_Cost_FOR_2	Reviews	Restaurant_Type_Main
Jalsa	1.0	1.0	4.1	775	Banashankari	Casual Dining	Chinese Indian Mughlai North	800	A beautiful place to dine in. The interiors tak...	Buffet
Spice Elephant	1.0	0.0	4.1	787	Banashankari	Casual Dining	Chinese Indian North Thai	800	Had been here for dinner with family. Turned o...	Buffet

Higher the number of services/cuisines provided by a restaurant, more likely it is to receive higher ratings

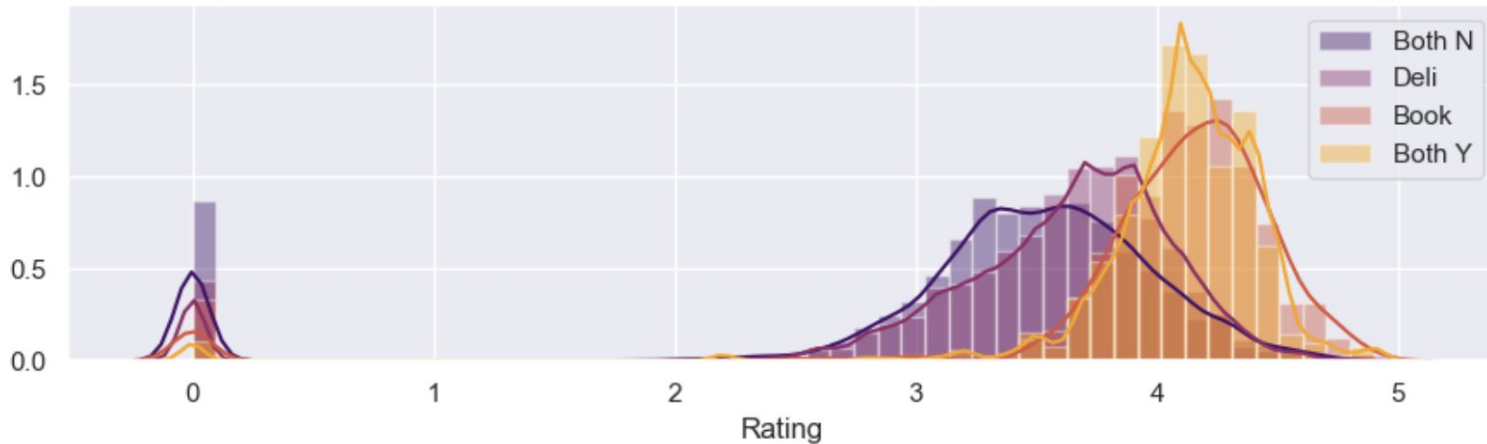
Managerial Insight:

The finding is explained by the fact - Restaurants offering more number of services(online ordering/table booking facility) or multiple cuisines to customers, tend to have higher ratings irrespective of the location and price. This is probably because customers enjoy the additional ease, convenience and variety in their dining experience. We could use this finding as follows - it would be highly lucrative to serve more than a single cuisine and have both delivery and booking table options.

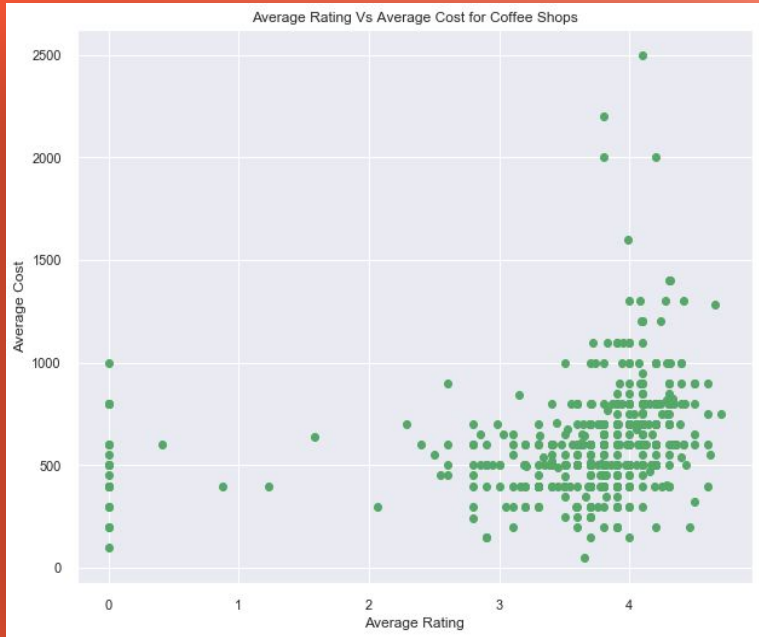




Rating Distribution V/S Number of Services Offered (Book Table / Online Delivery)



The higher the approximate Cost-for-2 for a cafe, the less likely it is to be popular

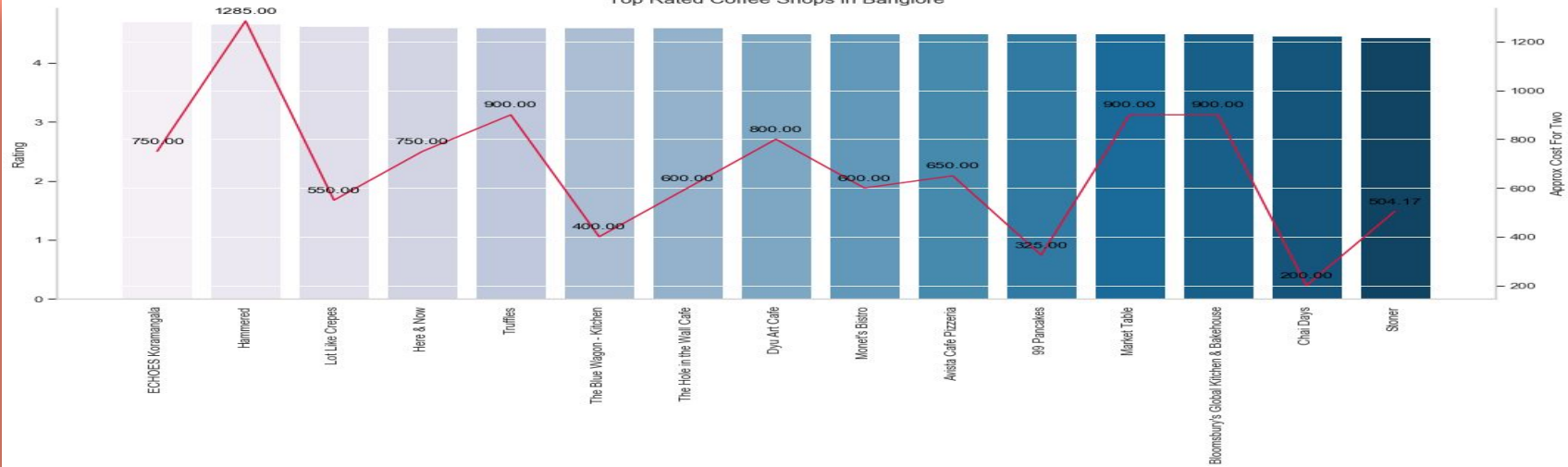


Managerial Insight:

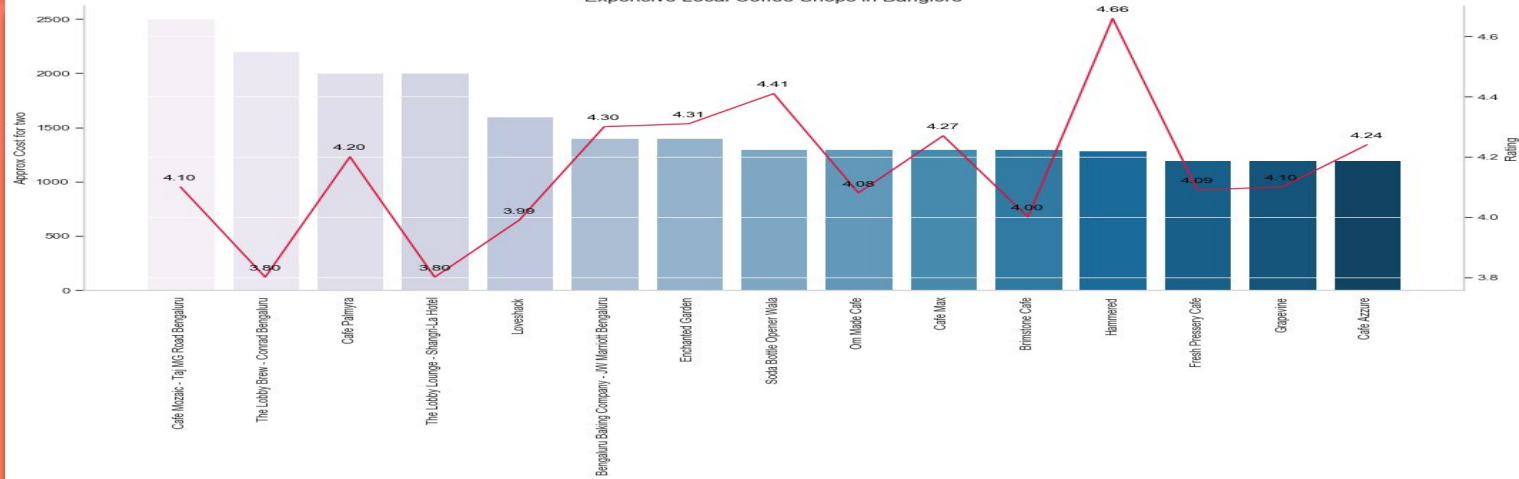
The finding is explained by the fact, the more expensive a cafe is, less popular it is amongst the customers. On the contrary, Cafes which are less expensive are more likely to be popular amongst customers. This is probably because cafes which are less expensive provide more wholesome customer experience than the expensive ones which are mainly concentrated in the Luxury hotels.

We could use this finding as follows - In order to open a profitable Cafe one should focus more on Customer experience and try to keep the pricing in the less expensive range.

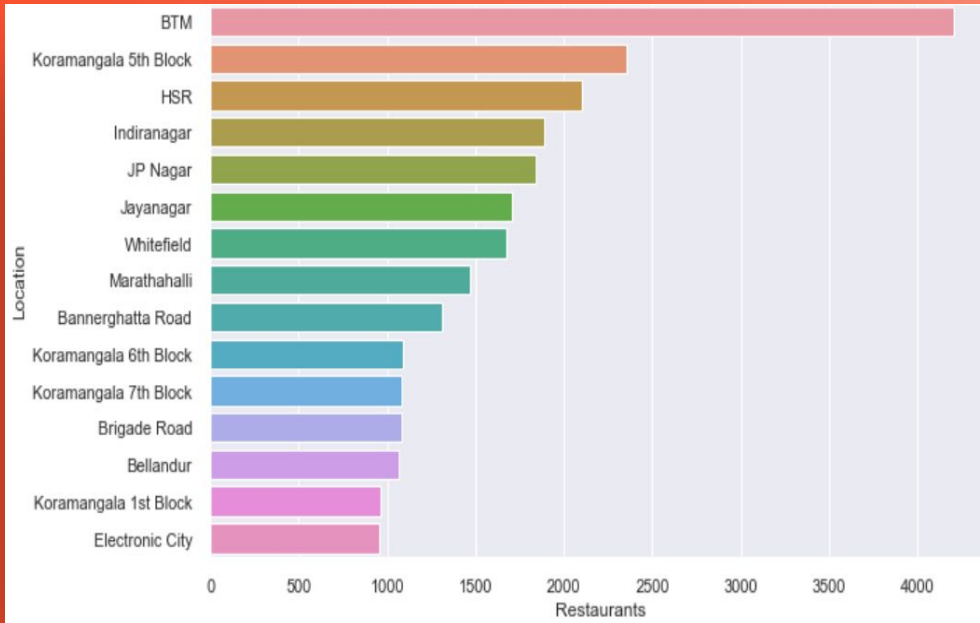
Top Rated Coffee Shops in Banglore



Expensive Local Coffee Shops in Bangalore



In high frequency restaurant locations, the category “Drinks & Nightlife” has the most positive ratings

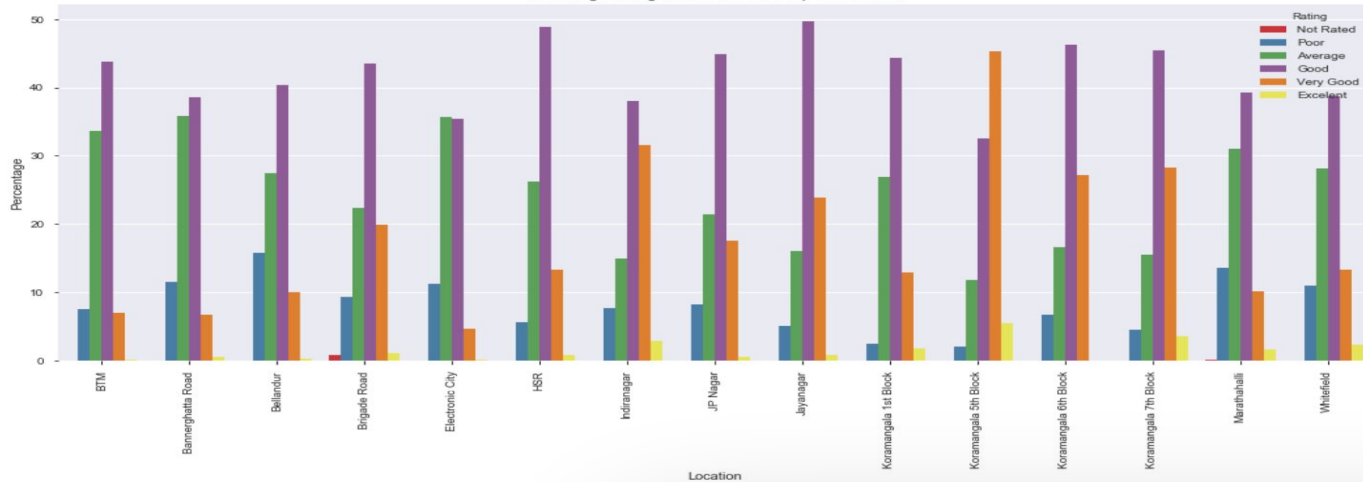


Managerial Insight:

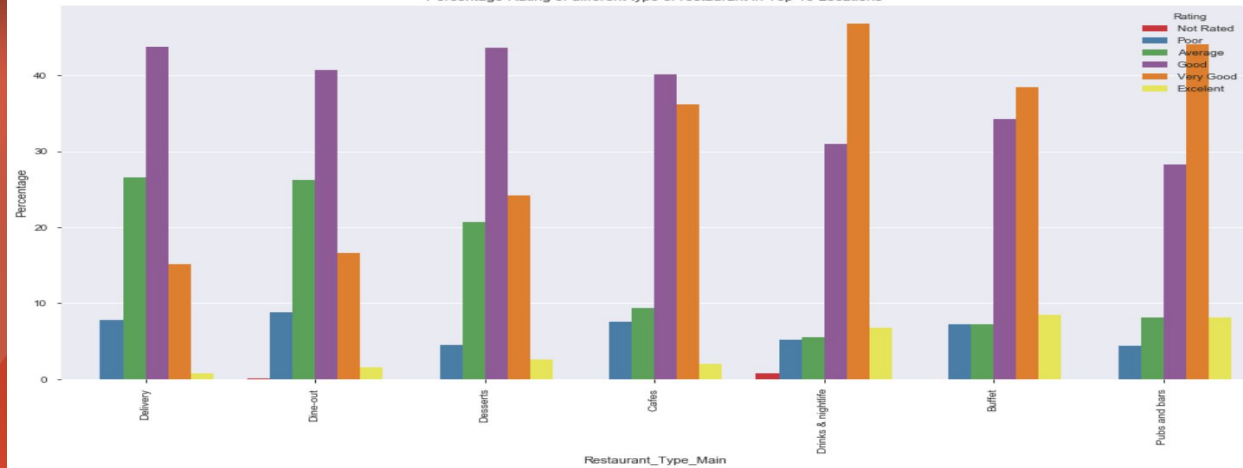
The finding is explained by the fact that in the high frequency restaurant locations in Bangalore there was an overall positive rating, when compared to the low frequency restaurant locations. Further we noted that in the high frequency restaurant locations, **Drinks & Nightlife** had the greatest positive rating amongst all the restaurant types.

We could use this finding as follows - The location and the type of restaurant has an impact on the rating. In order to open a successful restaurant in the high frequency restaurant location, one could take this into consideration.

Percentage Rating of Restaurants in Top 15 Locations



Percentage Rating of different type of restaurant in Top 15 Locations



Additional Findings

- Using Random Forest we found the top 10 important variables impacting rating. Further, we were able to predict rating with an accuracy of 88%
- North Indian food is more popular in Bangalore: We observed through Location based analysis of North and South Indian cuisine that restaurants serving north indian cuisine are more popular than those serving south indian cuisine
- Finding best restaurant on the basis of approximate cost for two and ratings- We found the best restaurants both which were cheapest and highly rated vs expensive and highly rated
- Sentiment analysis on the basis of Restaurant review data

Thank you

