**OBJECTIVE QUESTIONS**

1. The data consists of some inconsistent and missing values so ensure that the data used for further analysis is cleaned.

In the provided data, there were few missing values in Cuisines Column, about 9 missing values/blanks were found. Instead of removing those rows, blanks were filled using “Cuisines Unknown” values.

1. Using the LookUp functions, fill up the countries in the original data using the Country code.

Country names are extracted using VLOOKUP Function. The formula used is mentioned below:

=VLOOKUP(C2,'country description'!$A$2:$B$16,2,0)

1. Create a table to represent the number of restaurants opened in each country.

This is achieved by incorporating a pivot table, with countries in row labels and count of restaurants in values, which aids in useful analysis.



1. Also, the management wants to look at the number of restaurants opened in each year, so provide them with something here.

This is achieved by pivot table, with years as row labels and count of restaurants in values.as shown below:



1. What is the total number of restaurants in India in the price range of 4?

There are 388 restaurants in India with a price range of 4. This value is obtained with the aid of “COUNTIFS” aggregate function.

=COUNTIFS('Raw Data'!$U$2:$U$9552,"India",'Raw Data'!$Q$2:$Q$9552,"4")

1. According to the data, what is the average number of voters for the restaurants in each country?

The average number of voters in each countries is plotted with the pivot table with countries as row labels and average of voters as values.



**SUBJECTIVE QUESTIONS**

1.Suggest a few countries where the team can open newer restaurants with lesser competition. Which visualization/technique will you use here to justify the suggestions?

Based on the number of restaurants and average ratings for restaurants in countries, I recommend to open newer restaurants. Criteria to decide that is as follows:

* Number of existing restaurants < 50.
* Average ratings of restaurants < 4.

So, the countries which satisfy these criteria are the one’s where newer restaurants can be recommended:

* **Australia**
* **Canada**
* **Singapore**
* **Sri Lanka**

2. Come up with the names of States and cities in the suggested countries suitable for opening restaurants.

Suggested cities for newer restaurants are:

* Australia
  + Armidale
  + Balingup
  + Dicky Beach
  + Flaxton
  + Forrest
  + Hepburn springs
  + Inverloch
  + Lakes Entrance
  + Lorn
  + Macedon
  + Mayfield
  + Montville
  + Penola
  + Phillip Island
  + Victor Harbor
* Canada
* Chatam-kent
* Consort
* Yorkton
* Singapore
* Singapore
* Sri Lanka
* Colombo

3. According to the countries you suggested, what is the current quality regarding ratings for restaurants that are open there?

Countries and their quality regarding ratings are listed below:

|  |  |
| --- | --- |
| Country | Average Rating |
| Australia | 3.66 |
| Canada | 3.58 |
| Singapore | 3.58 |
| Sri Lanka | 3.87 |

4. Also, what is the current expenditure on food in the suggested countries, so we can keep our financial expenditure in control?

Since, we have limited data to have a note on expenditure on the food, I am utilizing average cost for two people as a metric to answer this question and it is shown below:

|  |  |
| --- | --- |
| Country | Average Expenditure |
| Australia | 24.08 |
| Canada | 36.25 |
| Singapore | 155.75 |
| Sri Lanka | 2375 |

5.Come up with the names of restaurants from the recommended states that are our biggest competitors and also those that are rated in the lower brackets, i.e. 1-2 or 2-3.

Here are few restaurants in the suggested countries:

* Australia
* Pier 70
* Poets Café
* Star Buffet
* Canada
* Consort Restaurant
* Singapore
* Makansutra Glutans Bay
* Sri Lanka
* Elite Indian Restaurant
* Queen’s Café

1. Which cuisines should we focus on in the newer restaurants to get better feedback? Does the of cuisines affect the restaurant ratings?

Based on the Observation from the Pivot table, restaurants with higher ratings have a wide variety of cuisines ie: not specific to the regional cuisines but also foreign cuisines.

Specifically it is difficult to recommend a cuisine for each restaurant., so introducing foreign cuisines besides Regional cuisines will always pave for better feedback and ratings.

1. According to our current data, should we go for online delivery and table booking? Does that

affect the customer’s ratings?

Based on Observation, Currently very fewer have the feasibility for Online Delivery and Table booking – from which we can infer that it might affect feedback and rating.

So, It is highly recommendable to have both Online delivery and Table booking

1. Should the team keep the rate of cuisines higher? Will that affect the feedback? According to our data are the rates of cuisines and ratings, correlated?

Co-relation between rate of cuisines (Average cost for two) and ratings is 0.0589

Which means rates of cuisines and ratings are not co-related, value near to zero indicates neutrally corelated.

So, it is better to decide the rates of cuisines on other factors., like: Types of Cuisines, Ambience..etc