# **Tasks**

**Learners have to develop a dashboard to support the answers to the following questions and suggestions for places for newer restaurants.**

**Objective Questions**:

1. What is the total no. of tables present in the data?

Ans. There are 2 tables present in the data

* + - 1. Raw data
      2. Country description

1. What is the total no. of attributes present in the data?

Ans. The total no. of attributes present in the data are 20.

1. How many categorical columns are there in the data?

Ans. There are total 15 categorical columns in this data

* + - 1. Restaurant ID
      2. Restaurant Name
      3. Country Code
      4. City
      5. Address
      6. Locality
      7. Locality Verbose
      8. Cuisines
      9. Currency
      10. Has Table booking
      11. Has Online delivery
      12. Is delivering now
      13. Switch to order menu
      14. Price range
      15. Date key Opening

These are categorical columns as they consist fix values such as name, Labels or categories not numbers, measures to quantify

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

Ans. The inconsistencies I found in the data and how I delt with them :-

1.There were some missing values in the cousins, I found it by ctrl + G and replaced each blank cell with NA

2.The inconsistency was the spacing I replaced all “\_” with “ “ so that we search those terms it would be easy for us

3. In the dates section the dates were not in date format so I first selected the entire column replaced all “\_” with “-“ . then I changed the format of the column from general to date and selected the short date format

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

Ans. For this,

* + - 1. I created a new column next to the “CountryCode” column named Countries
      2. Then I used the formula “=VLOOKUP(C2:C9552,'country description'!A1:B16, 2, 0 )” and pressed enter
      3. All countries names were filled in the “Countries” column according to the country code

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

Ans.

* + - 1. Created a new worksheet naming it “working” here I will do the further working of the project
      2. Inserted a pivot table in “working” by going into insert tab and selecting pivot table option
      3. And to for the range of the pivot table I went to the raw data section and selected whole data and pressed enter
      4. Now the pivot table has formed, and now I opened the pivotable analyze tab and field list in it
      5. Then I dragged the country column into rows and restaurant ID column into values
      6. Then I selected the count format for the restaurant ID column and renamed the headings to “Country” and “No. of restaurants”
      7. Now I got the no. of restaurant in each country in table format

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

Ans. The steps I followed :-

* + - 1. First, I separated years from date by creating a new column “year” using (=YEAR( )) function and flash fill option
      2. I inserted a pivot table in the “working” work sheet, selecting all data in “raw data”
      3. In this pivot table I used “year” column in rows and “RestaurantID” column in values and set its format as count
      4. Now, we have got a new table with number of restaurants opened each year.

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

Ans.

The steps I followed:-

* + - 1. I inserted a pivot table in “working” selecting all data in “raw data”
      2. In this pivot table I used “country” in rows, “price range” in columns and “RestaurantID” in values and set its format as count
      3. I used the filters and selected India in rows and 4 in columns
      4. Now, we have got the number of restaurants in India with price range of 4 and i.e **388**

1. What is the average number of voters for the restaurants in each country according to the data?

Ans.

The steps I followed:-

* + - 1. I inserted a pivot table in “working”, selecting all data “raw data”
      2. In this pivot table I used “country” in rows and “voters” in values and set its format in average
      3. Now, we have got a new table with the average number of voters according to each country

1. Calculate the average rating for all the restaurants that have price\_range < 4 and provide online delivery. Use only the “IF” function, Logical Operators, and Aggregation functions to solve this problem. **[Note: Don’t use Conditional aggregation in this question.]**

**Ans.**

To get the average ratingrating for all the restaurants that have price\_range < 4 and provide online delivery I went through these steps

* + - 1. I calculated the aggregate rating of all the restaurants that have price range < 4 and provide online delivery and to do that I use this formula

=SUM(IF((range of price range<4) \* (range of online delivery= “YES”), range of rating))

* + - 1. the aggregate rating of all the restaurants that have price\_range < 4 and provide online delivery is

7850.6

* + - 1. After this, I calculated the number of restaurants satisfying these conditions by this formula

=SUM(IF((range of price range<4) \* (range of online delivery= “YES”), range of rating))

* + - 1. The number of restaurants satisfying these conditions are

2398

* + - 1. To get the average rating we have to divide the aggregate rating cell by the cell with the number of restaurants
      2. So the average rating for all the restaurants that have price range < 4 and provide online delivery is

3.27

1. Using Conditional formatting highlight the rows of restaurants that are located in the countries or cities that you’ve suggested to the management for opening new restaurants.

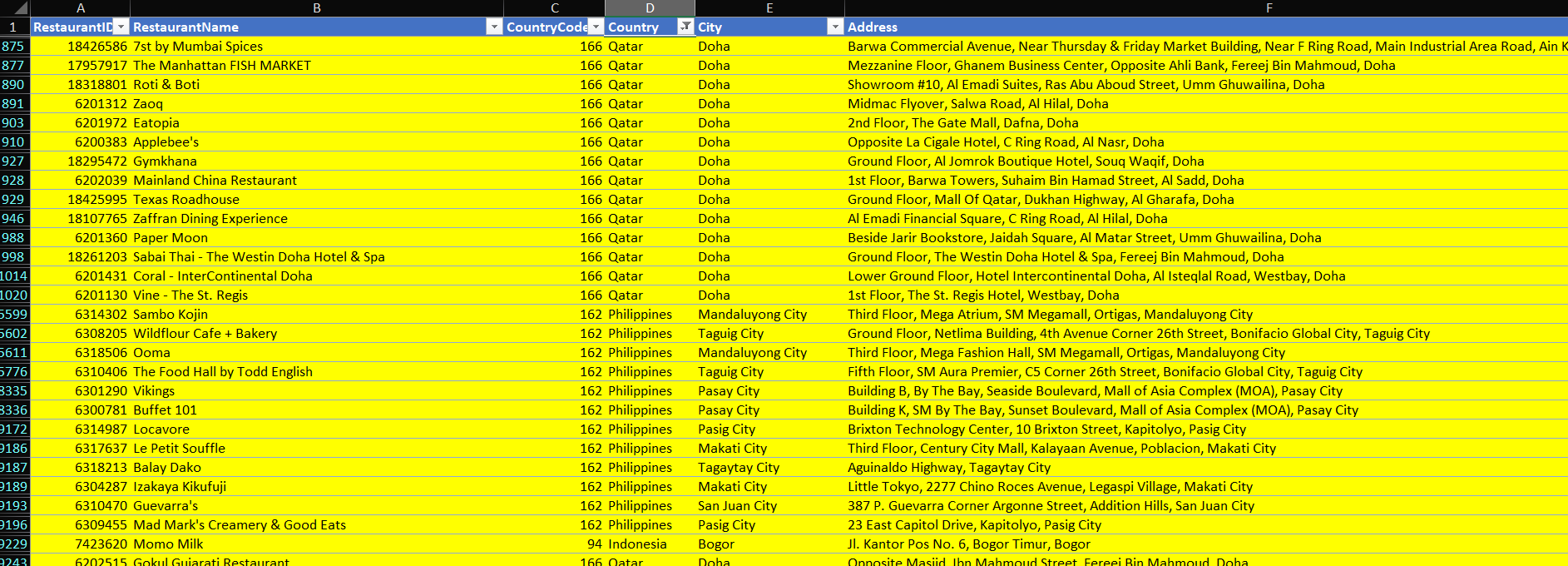
Ans.

The steps I followed:-

* + - 1. Selected all data except header
      2. Clicked on conditional formatting option in home tab
      3. Choose new rule option from the dropdown menu
      4. Selected "Use a formula to determine which cells to format" option from the dialogue box
      5. Used this formula

=OR(TRIM($D2)="Qatar",TRIM($D2)="Indonesia",TRIM($D2)="Philippines")

to highlight all rows of restaurants that are located in Qatar, Indonesia and Philippines. These countries were selected based on the low number of restaurants, making it a priority for expansion analysis. Highlighting these rows makes it easier to interpret trends, filter for comparisons, and visually support the final recommendation.

* + - 1. Applied “yellow” colour to the fill in format option and pressed enter
      2. Now the conditional formatting has been applied on the data according to the countries I have selected for expansion 

This is snapshot of conditional formating after selecting recommended countries in filters

1. Create a new customized price column that consists of the abbreviation/symbol of the currency along with the Average\_cost\_for\_two value. [Use string operations to do this task]

Ans.

* + - 1. I inserted a new “price” column next to “average cost of two” column
      2. Then used this formula to extract currency abbreviation from “currency” column and merging them with the values of “average cost of two” column

=MID(B2, FIND("(", B2) + 1, FIND(")", B2) - FIND("(", B2) - 1) & " " & C2

* + - 1. Now, we have a new customized price column that consists of the abbreviation/symbol of the currency along with the Average cost for two value

1. How can you create an array formula in Excel or Google Sheets to count the number of restaurants listed that do not offer online delivery, are in the lowest price range, and have an average cost for two people less than or equal to 250 Indian Rupees?

Ans.

To create this array formula we need for criteria

 (raw[Has Online delivery]="No")→ checks for no online delivery

 (raw[Price range]=1)→ lowest price range

 (raw[Average Cost for two]<=250)→ cost condition

(raw[Currency]="Indian Rupees(Rs.)") = currency condition

And we need to arrange these criteria in formula as follows

=SUM((raw[Currency]="Indian Rupees(Rs.)")\*(raw[Has Online delivery]="No")\*(raw[Price range]=1)\*(raw[Average Cost for two]<=250))

And by this formula we will get the count of the number of restaurants listed that do not offer online delivery, are in the lowest price range, and have an average cost for two people less than or equal to 250 Indian Rupees which is 1685

**Subjective Question:**

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?

Ans.

To suggest countries the team can open newer restaurants with lesser competition I worked on two main factors

* 1. Count of restaurants in each country
  2. Average of rating for each country

I used these factors because, count of restaurants in each country to examine the competition in each country, countries with lesser number of restaurants have low competition

And average of rating for each country to determine which countries have higher customer satisfaction and positive customer experience, countries with higher rating fulfil these requirements

So to get this data,

I created a pivot table and put countries in rows and count of restaurant and rating in values and changed their value setting to count and average respectively

|  |  |  |
| --- | --- | --- |
| **Row Labels** | **Count of RestaurantID** | **Average of Rating** |
| Australia | 24 | 3.66 |
| Brazil | 60 | 3.85 |
| Canada | 4 | 3.58 |
| India | 8652 | 2.77 |
| Indonesia | 21 | 4.30 |
| New Zealand | 40 | 4.26 |
| Philippines | 22 | 4.47 |
| Qatar | 20 | 4.06 |
| Singapore | 20 | 3.58 |
| South Africa | 60 | 4.21 |
| Sri Lanka | 20 | 3.87 |
| Turkey | 34 | 4.30 |
| United Arab Emirates | 60 | 4.23 |
| United Kingdom | 80 | 4.10 |
| United States of America | 434 | 4.01 |
| **Grand Total** | **9551** | **2.89** |

Based on these two factors countries I recommend are

* Qatar
* High rating (4.06)
* Low number of restaurants (20)

Good customer satisfaction, untapped market

* Philippines
* High rating (4.46)
* Low number of restaurants (22)

Great user satisfaction

* Indonesia
* High rating (4.29)
* Low number of restaurants (21)

Higher customer satisfaction

I used custom combo chart indicating number of restaurants and average rating on the same chart on different axis and in different formats, number of restaurants in bars and average rating in line , if the difference between bar and line

Is greater then it’s more likely to be suggested

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

Ans.

To suggest cities/states the team can open newer restaurants with lesser competition I worked on two main factors

* 1. Count of restaurants in each cities/states.
  2. Average of rating for each cities/states.

I used these factors because, count of restaurants in each city/state to examine the competition in each city/state, cities/states with lesser number of restaurants have low competition

And average of rating for each city/state to determine which cities/states have higher customer satisfaction and positive customer experience, cities/states with higher rating fulfil these requirements

So to get this data,

I created a pivot table and put countries and cities in rows and count of restaurant and rating in values and changed their value setting to count and average respectively

|  |  |  |
| --- | --- | --- |
| **Row Labels** | **Count of RestaurantID** | **Average of Rating** |
| **Indonesia** |  |  |
| Bandung | 1 | 4.20 |
| Bogor | 2 | 3.85 |
| Jakarta | 16 | 4.36 |
| Tangerang | 2 | 4.30 |
| **Philippines** |  |  |
| Makati City | 2 | 4.65 |
| Mandaluyong City | 4 | 4.63 |
| Pasay City | 3 | 4.37 |
| Pasig City | 3 | 4.63 |
| Quezon City | 1 | 4.80 |
| San Juan City | 2 | 4.25 |
| Santa Rosa | 2 | 3.80 |
| Tagaytay City | 1 | 4.50 |
| Taguig City | 4 | 4.53 |
| **Qatar** |  |  |
| Doha | 20 | 4.06 |
| **Grand Total** | **63** | **4.28** |

Based on these two factors

cities/states I recommend are

* Qatar
* Doha (4.06 rating) (20 restaurants)

This city is not highly recommended by me because the number of restaurants are too much but if management wants to open new restaurants in Qatar they should definitely consider this city cause it’s the best city there in Qatar

* Philippines
* Quezon city (4.8 rating) (1 restaurant)
* Makati city (4.65 rating) (2 restaurants)
* Tagaytay city (4.5 rating) (1 restaurant)
* San Juan city (4.25 rating) (2 restaurants)

This country has best and more number of cities for opening new restaurants

* Indonesia
* Bandung city (4.2 rating) (1 restaurant)
* Tangerang city (4.3 rating) (2 restaurant)

This country is also has considerably good cities for opening new restaurants

I used custom combo chart indicating number of restaurants and average rating on the same chart on different axis and in different formats, number of restaurants in bars and average rating in line, if the difference between bar and line Is greater then it’s more likely to be suggested

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

Ans.

Following our earlier recommendation of Philippines, Qatar, Indonesia, we assess the restaurant quality based on average customer ratings

So by using the pivot table option in home tab I created a pivot table from whole data and put countries in rows and count of restaurant and rating in values and changed their value setting to count and average respectively\

Then, I used filter option and filtered out countries I have suggested which are Philippines, Qatar, and Indonesia

By doing this I got this table

|  |  |  |
| --- | --- | --- |
| **Country** | **No. of Restaurants** | **averagae customer rating** |
| Indonesia | 21 | 4.30 |
| Philippines | 22 | 4.47 |
| Qatar | 20 | 4.06 |

And by analysing this table I found that,

* Philippines stands out with the highest average rating (4.47) despite being the country with highest no. of restaurants in these three countries indicating excellent customer satisfaction
* Indonesia follows closely with (4.30) rating also with higher no. of countries suggesting high quality experiences
* Qatar maintains a good score at (4.06) rating with 20 restaurants but we can’t ignore the fact that all of these 20 restaurants are only in one city “Doha” which means its rating is remarkably high after such a huge competition, indicates the quality here is very good

So, after analysing this data we know that these countries are not just low in competition but also have higher quality of customer satisfaction.

Recommendations

All three markets not only offer **low saturation** but also exhibit **high quality** as perceived by customers. Therefore, we **strongly**

**recommend moving forward with expansion plans** in these countries, with a focus on:

* **Philippines** as the primary target due to its outstanding rating and existing demand,
* **Indonesia** for its rapidly emerging quality market, and
* **Qatar** for targeted growth beyond Doha.

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

Ans.

To calculate the current expenditure on food in the suggested countries,

First I created a new column “converted cost of two” in which we will get average cost of two converted into INR so that we can easily compare the prices between different countries

And to do that I created a table consisting conversion rate of all currencies

|  |  |
| --- | --- |
| **Currency Code** | **1 Unit ≈ INR** |
| Rs. | 1 |
| R$ | 17 |
| IDR | 0.0053 |
| P | 1.45 |
| QR | 22.85 |
| NZ | 52 |
| R | 4.45 |
| LKR | 0.27 |
| TL | 2.75 |
| AED | 22.5 |
| Œ£ | 107 |
| $ | 83 |

Now, I used this formula

=IFERROR(S2 \* VLOOKUP(U2,Table2[#All], 2, FALSE), "")

To fill values in the new “converted cost of two column”

Now that we have this new column , then I inserted new pivot table and selected “countries” column in rows and “converted cost of two” column in values and set it to average

So now we have this table

|  |  |
| --- | --- |
| **Currency Code** | **1 Unit ≈ INR** |
| Rs. | 1 |
| R$ | 17 |
| IDR | 0.0053 |
| P | 1.45 |
| QR | 22.85 |
| NZ | 52 |
| R | 4.45 |
| LKR | 0.27 |
| TL | 2.75 |
| AED | 22.5 |
| Œ£ | 107 |
| $ | 83 |

|  |  |
| --- | --- |
| **Row Labels** | **Average of Converted Cost of Two** |
| Indonesia | 1490.309524 |
| Philippines | 2426.295455 |
| Qatar | 5253.65 |
| **Grand Total** | **3011.873016** |

Now we can easily compare the current expenditure on food in suggested countries so we can keep our financial expenditure in control so after analysing this table I came to conclusion that

* Indonesia is the cheapest country in these three, where the average cost of two is rupees 1462 so have to spend very less on food cost
* Philippines on the other hand is the most expensive country in these three, where the average cost of two is rupees 2426 so we have to spend a good amount on food cost but while maintaining a hefty amount of profit.
* Qatar is not the most expensive country here, because it offers food at high price as its average cost of two is rupees 5056 it means we can spend a handsome amount on food cost we can charge more to increase our profit because people tend to pay more on food here.

Final recommendation

Based on the food cost analysis, Indonesia is best suited for a cost-effective, high-volume strategy, while the Philippines allows for a balanced model with room for decent profit. Qatar presents the most premium opportunity, where customers are willing to spend more, allowing us to set higher prices and focus on a luxury dining experience. By aligning our pricing and service strategy with each country’s spending behavior, we can ensure profitability while catering to local market expectations.

1. 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.

Ans.

To come up with the names of restaurants from the recommended states that are our biggest competitors we need to sort out restaurants with highest ratings in the suggested cities so for that

I went through the following steps

* + - 1. I hid all the insignificant columns, only kept the columns “RestaurantName” “Country” “City” “Rating”
      2. I filtered out the suggested countries and cities
      3. I filtered out rating >(4.2)

|  |  |  |  |
| --- | --- | --- | --- |
| **RestaurantName** | **Country** | **City** | **Rating** |
| Zaoq | Qatar | Doha | 4.2 |
| Gymkhana | Qatar | Doha | 4.7 |
| Mainland China Restaurant | Qatar | Doha | 4.9 |
| Zaffran Dining Experience | Qatar | Doha | 4.6 |
| Paper Moon | Qatar | Doha | 4.5 |
| Sabai Thai - The Westin Doha Hotel & Spa | Qatar | Doha | 4.3 |
| Vine - The St. Regis | Qatar | Doha | 4.4 |
| Le Petit Souffle | Philippines | Makati City | 4.8 |
| Balay Dako | Philippines | Tagaytay City | 4.5 |
| Izakaya Kikufuji | Philippines | Makati City | 4.5 |
| Guevarra's | Philippines | San Juan City | 4.2 |
| Gokul Gujarati Restaurant | Qatar | Doha | 4.3 |
| Talaga Sampireun | Indonesia | Tangerang | 4.9 |
| Sodam Korean Restaurant | Philippines | San Juan City | 4.3 |
| Noah's Barn Coffeenery | Indonesia | Bandung | 4.2 |
| Silantro Fil-Mex | Philippines | Quezon City | 4.8 |

Now by following these steps I got this table

Now by analysing this table our biggest competitors in the following cities are

* Doha
* Mainland China Restaurant (4.9)
* GymKhana (4.7)
* Makati city
* Le Petit Souffle (4.8)
* Tagaytay city
* Balay Dako (4.5)
* San Juan City
* Sodam Korean restaurant (4.3)
* Quezon city
* Silantro Fil-Mex (4.8)
* Tangerang
* Talaga Sapireun (4.9)
* Bandung
* Noah’s Barn Coffeenery (4.2)

Their were no restaurants in the cities I recommended which were in the lower brackets

**Recommendations:**

The presence of highly rated restaurants like Mainland China (4.9 in Doha), Le Petit Soufflé (4.8 in Makati), and Talaga Sampireun (4.9 in Tangerang) suggests we’ll be entering a **competitive market with high standards**. To

succeed:

* We must **match or exceed** the existing service and food quality.
* In Qatar, we can focus on a **premium experience**, since consumers are willing to pay more.
* In the Philippines, we should offer **unique value or signature items** to stand out in a crowded mid-premium space.
* In Indonesia, we can attract customers by offering **affordable options with consistent quality**.

As no low-rated competitors (1–2 or 2–3) were found, we must be cautious—**the market does not tolerate poor performance**, and maintaining high ratings will be critical.

**Conclusion:**

The recommended cities show a strong presence of highly rated restaurants, and an absence of low-rated ones. This confirms that we are targeting **mature and quality-driven markets**. To establish ourselves successfully, we must **compete on quality, service, and value**, while continuously monitoring customer feedback and ratings. A well-positioned brand with strong local execution can thrive in these competitive yet rewarding locations.

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

Ans.

To know Which cuisines should we focus on in the newer restaurants to get better feedback I followed these steps

* + - 1. I created a pivot table and selected countries and cuisines in rows and count of restaurant id and average of rating in values and set them to count and average respectively
      2. Then I filtered out the countries we are recommending
      3. Now we have a table with all cuisines country wise with the count of restaurants and average rating accordingly
      4. Now we have cuisines with high avg rating and with more no. of restaurants because if the cuisines are performing good in more than one restaurant then it is definitely good
      5. Then I went to design 🡪 report layout 🡪 show tabular form🡪 Repeat all Item Labels to separate countries and cuisines columns
      6. And arranged ratings in descending so that we get high rated cuisines at top
      7. Then created a new table of the selected cuisines now we can focus on these cuisines while opening new restaurants in the recommended countries

|  |  |  |
| --- | --- | --- |
| Indonesia | Sunda, Indonesian | 4.9 |
| Indonesia | Sushi, Japanese | 4.9 |
| Indonesia | Desserts, Bakery, Western | 4.6 |
| Indonesia | Cafe, Italian, Coffee and Tea, Western, Indonesian | 4.6 |
| Indonesia | Asian, Indonesian, Western | 4.6 |
| Indonesia | Japanese, Sushi, Ramen | 4.4 |
| Indonesia | Burger | 4.4 |
| Indonesia | Cafe, Western | 4.3 |
| Indonesia | French, Western | 4.3 |
| Indonesia | Western, Asian, Cafe | 4.2 |
| Indonesia | Cafe, Coffee and Tea, Western | 4.2 |
| Indonesia | Japanese | 4.2 |
| Indonesia | Italian, Continental | 4.1 |
| Indonesia | Peranakan, Indonesian | 4 |
| Indonesia | Korean | 3.9 |
| Indonesia | Cafe, Desserts, Beverages | 3.7 |
| Indonesia | Seafood, Western | 3.7 |
| Indonesia | Indonesian | 3.7 |
| Philippines | European, Asian, Indian | 4.9 |
| Philippines | Japanese, Sushi | 4.9 |
| Philippines | Filipino, Mexican | 4.85 |
| Philippines | Japanese, Korean | 4.8 |
| Philippines | French, Japanese, Desserts | 4.8 |
| Philippines | Seafood, American, Mediterranean, Japanese | 4.7 |
| Philippines | American, Asian, Italian, Seafood | 4.5 |
| Philippines | Japanese | 4.5 |
| Philippines | Filipino | 4.5 |
| Philippines | Cafe, Korean, Desserts | 4.5 |
| Philippines | Chinese | 4.4 |
| Philippines | Seafood, Asian, Filipino, Indian | 4.4 |
| Philippines | Cafe, Bakery, American, Italian | 4.4 |
| Philippines | Korean | 4.3 |
| Philippines | American, Ice Cream, Desserts | 4.2 |
| Philippines | Seafood, Filipino, Asian, European | 4.2 |
| Philippines | Asian, European | 4 |
| Philippines | Italian, Pizza | 4 |
| Philippines | Cafe, American, Italian, Filipino | 3.6 |
| Qatar | Chinese | 4.9 |
| Qatar | Italian | 4.5 |
| Qatar | Thai | 4.3 |
| Qatar | Indian | 4.18 |
| Qatar | International | 4.05 |
| Qatar | Pakistani | 4 |
| Qatar | Steak, American | 4 |
| Qatar | Seafood, American | 4 |
| Qatar | Kerala, Indian, Chinese, Bakery | 4 |
| Qatar | European, Arabian, Japanese, Bakery, Desserts | 3.9 |
| Qatar | North Indian, Chinese, Turkish | 3.8 |
| Qatar | American, Tex-Mex | 3.8 |
| Qatar | Steak | 3.6 |
| Qatar | Indian, Street Food | 3.4 |
| Grand Total |  | 4.280952381 |

We can focus on “Sunda, Indonesian” and “sushi, Japanese” cuisines for opening new restaurants in Indonesia

And we can focus on European, Asian, Indian, Filipino, Mexican, Japanese, Korean, sushi, seafood, American, and mediterranean cuisines for opening new restaurants in Philippines

And we can focus on Chinese, Indian, international, Pakistani cuisines for opening new restaurants in Qatar

And Yes, the choice of cuisines does affect the restaurant ratings

As all cuisines have different ratings

Recommendation

The analysis shows that cuisine selection plays a **crucial role** in a restaurant’s overall rating and customer feedback. By focusing on **high-performing cuisines** that are already popular and well-rated in the target countries, we can increase our chances of gaining customer trust, improving satisfaction, and building a strong brand reputation. Local taste preferences combined with consistently good quality are the keys to success in these competitive markets.

1. According to our current data, should we go for online delivery and table booking? Does that affect the customer’s ratings?

Ans. According to our current data , I analysed and reach to the result by following these steps

* + - 1. I created two pivot tables , one for the table bookings and one for the online bookings
      2. I selected countries and table bookings in the rows and count of restaurants and average rating in columns
      3. Then I created charts for each pivot table to visually represent the data

These are the tables and charts

|  |  |  |
| --- | --- | --- |
| **Table Bookings** | **Count of RestaurantID** | **Average of Rating** |
| **Indonesia** |  |  |
| No | 21 | 4.30 |
| **Philippines** |  |  |
| No | 8 | 4.43 |
| Yes | 14 | 4.49 |
| **Qatar** |  |  |
| No | 19 | 4.03 |
| Yes | 1 | 4.70 |

|  |  |  |
| --- | --- | --- |
| **Online delivery** | **Count of RestaurantID** | **Average of Rating** |
| **Indonesia** |  |  |
| No | 21 | 4.30 |
| **Philippines** |  |  |
| No | 22 | 4.47 |
| **Qatar** |  |  |
| No | 20 | 4.06 |
|  |  |  |

In these tables and charts and we can easily see that table booking is not available in any restaurants in Indonesia and same with Qatar, it has only one restaurant with table booking but this is not a considerable data but if we see about Philippines there is a very considerable amount of data and we can easily see that (14) restaurants have table bookings with (4.49) average rating and (8) restaurants have (4.43) average rating so after analysing this data I don’t think we should so for table bookings because it is making a negligible change it’s not worth the amount of work we need to put into it

And about online deliveries, none of the countries we recommended have online deliveries so we don’t have data to analyse but we can reach the conclusion that these countries are already performing good without online deliveries so we don’t really need to provide online deliveries .

And no the table bookings and online delivery don’t really make a big difference in customer ratings

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?

Ans. To determine if the team should keep the rate of cuisines higher and will that

Affect the customer rating or not we first need to find if the cuisines and ratings are correlated or not and to determine that I followed these steps

* + - 1. I used the formula [ =CORREL([average cost of two], [rating] )

The result was (0.314831) it signifies that there is a weak positive relation. This suggests that **slightly higher-priced restaurants tend to receive better feedback**, possibly because customers associate higher cost with better quality, service, or ambiance

The final recommendation is that the team can increase the price of cuisines if it comes with a better experience

1. What is the distribution of the number of restaurants of different price ranges in all the countries?

Ans. To find out the distribution of the number of restaurants of different price ranges in all countries I went through the following steps

* + - 1. I created a pivot table
      2. And then I selected countries in rows
      3. Price range in columns
      4. And count of restaurants in values

So I got this table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **restaurants according to price range** | **price range** |  |  |  |
| **countries** | **1** | **2** | **3** | **4** |
| Australia | 4 | 14 | 5 | 1 |
| Brazil | 2 | 7 | 16 | 35 |
| Canada |  | 3 |  | 1 |
| India | 4295 | 2858 | 1111 | 388 |
| Indonesia |  | 1 | 20 |  |
| New Zealand | 3 | 4 | 17 | 16 |
| Philippines |  | 1 | 12 | 9 |
| Qatar |  | 1 | 5 | 14 |
| Singapore |  | 1 | 5 | 14 |
| South Africa |  | 4 | 17 | 39 |
| Sri Lanka |  | 6 | 11 | 3 |
| Turkey |  | 11 | 18 | 5 |
| United Arab Emirates |  | 9 | 29 | 22 |
| United Kingdom | 4 | 28 | 32 | 16 |
| United States of America | 136 | 165 | 110 | 23 |
|  |  |  |  |  |
|  |  |  |  |  |

Now by analysing this table we can determine which price range we should focus on according to the country like in

* + - * 1. In Indonesia we should focus on price range (3)
        2. In Philippines we can focus on both (3) and (4) because there isn’t a big difference
        3. In Qatar we should focus on price range (4) because it has most restaurants in that price range

1. Explain your approach in brief for suggesting countries/cities in order to open new restaurants, if the objective and subjective questions would have not been given to assist you. **[you have to give bullet pointers in order to answer this question]**

**Ans.**

I began by exploring the dataset without any predefined questions. My first step was to understand the data structure — I used filters and sorting to scan through columns like country, city, price range, ratings, and votes.

* Using Pivot Tables, I analyzed the distribution of restaurants across countries and cities. This helped me identify regions that are
* underrepresented and may offer growth potential due to lower competition.
* I calculated average ratings and average cost for two per country using aggregation functions (like AVERAGEIF, COUNTIF), which gave insights into customer satisfaction and pricing trends in different markets.
* I applied conditional formatting to highlight cities where online delivery or table booking is missing suggesting opportunities to offer those services and stand out from current competitors.
* To assess engagement, I checked the total and average number of votes per country and city, helping me find areas with active food delivery culture
* I used Pivot Charts and Stacked Column Charts to visualize price range distribution and service gaps, making it easier to compare locations side by side.
* For cuisine analysis, I used text filters and grouping techniques to identify the most common and best-rated cuisines in each country.
* Based on all these observations restaurant count, service availability, rating trends, price ranges, and cuisine demand I shortlisted cities and countries with strong potential for expansion.