

The slide features a large orange circle on the left containing the text 'Capstone Project'. A small blue circle is positioned at the bottom-left edge of the orange circle. To the right of the orange circle is a bulleted list of group members. In the top-right corner, there is a decorative yellow dashed arc.

Capstone Project

- Group Members:
- **Muhammad Wajeeh Arif**
- **Mohsin Motlani**
- **Hina Motiani**
- **Areeba Siddiqui**
- **Zubair**
- **Rana Taimoor**

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The slide features a large orange semi-circle on the left containing the text 'Contents'. To the right of the semi-circle is a bulleted list of the document's contents. In the bottom-right corner, there is a decorative yellow dashed arc.

Contents


- About Data
- ERD
- Data Dictionary
- Business Problem & Visualization
- Conclusion

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About Data

DATA SET : Restaurant Ratings


- Data Collected in Mexico by real users in 2012
 - Data includes additional information about each restaurant
 - Also includes their cuisines and each customer and their preferences
 - Here consumers are highly focused, since their feedback matters to Restaurant Managers.
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About Data

Why we choose this dataset

- In today's world every business runs on consumers demand or the businesses which make consumers their first priority.
 - We found this dataset simple to understand and to work on. We tried to make it complex by mapping it through different angles.
 - Our goal and challenge was to make it interesting by drawing insights that can be fruitful for our Restaurant Managers and we help them build their businesses!
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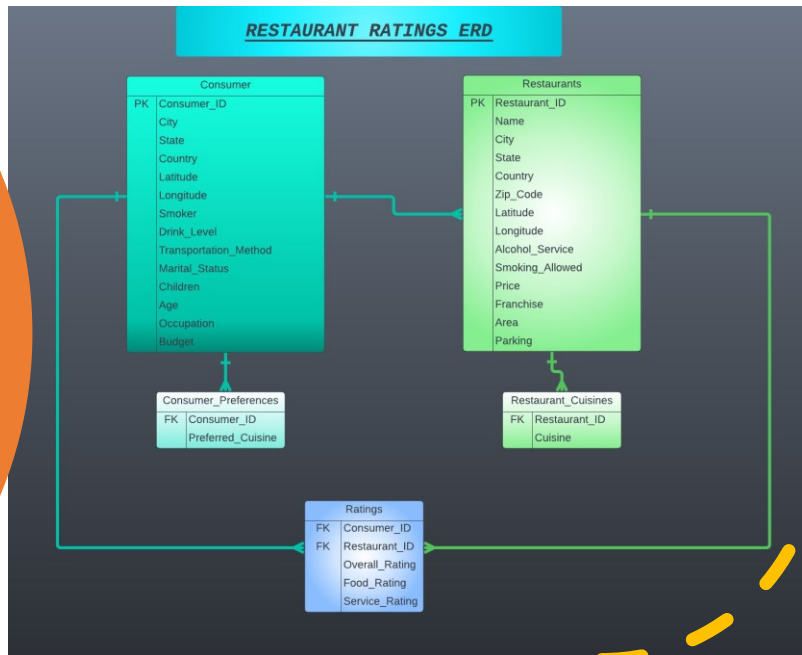
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Data Dictionary

- Total 5 tables are available in restaurants ratings as:
 1. Consumers
 2. Consumer_Preferences
 3. Ratings
 4. Restaurants
 5. Restaurant_Cuisines
- Data Dictionary can be shown separately in an excel sheet(on demand).

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Entity Relationship Diagram (ERD)

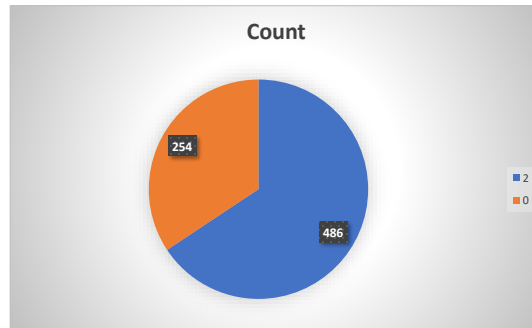


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Business Problems

Q1) How many times Restaurants get lowest and highest ratings?

- Each Consumer is giving ratings (2 > 1 > 0) to multiple restaurants that counts 1161 times to total.
- We found out that out of which there are 486 times highest and 254 times lowest overall ratings are given to restaurants.



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Business Problems

Q2) How many Restaurants get lowest and highest ratings and by which Consumers?

- This query is same as earlier, only difference is that here we also mentioned the consumers which give ratings.
- There are 138 consumers who give overall ratings and ratings are given by same user multiple times to distinct Restaurants.



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Business Problems

Q3) Select all Restaurants where public parking is available and their budget is low?

- There are 7 restaurants out of 130 give public parking although their budget is low.

	Name	Parking	Price
▶	Puesto de Gorditas	Public	Low
	Tacos De Barbacoa Enfrente Del Tec	Public	Low
	Hamburguesas La Perica	Public	Low
	Gorditas Doa Gloria	Public	Low
	Hamburguesas Saul	Public	Low
	Subway	Public	Low
	Cafeteria Cenidet	Public	Low

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Business Problems

Q4) What can you learn from the top 5 highest rated and lowest rated Restaurants ? Do Consumer Preferences have an effect on ratings?

- Through these findings we analyzed that restaurant where smoking is not allowed, alcohol service is not almost allowed, have no franchise, area is closed.
- Whereas we analyzed in lowest rated restaurants that where smoking, alcohol service is allowed, is preferably low rated.
- For Preferences we analyzed top 3 cuisines are (Mexican, Japanese, Coffee Shop) but consumer preferences does not affect ratings.

HIGH RATED

	Name	Smoking_Allowed	Alcohol_Service	Area	Franchise	Parking
▶	Tortas Locas Hipocampo	No	None	Closed	No	Public
	Puesto De Tacos	No	None	Open	No	None
	La Cantina Restaurante	No	Full Bar	Closed	No	None
	La Posada Del Virrey	No	Wine & Beer	Closed	No	Valet
	Restaurant Las Mañanitas	No	Wine & Beer	Closed	No	Yes

LOW RATED

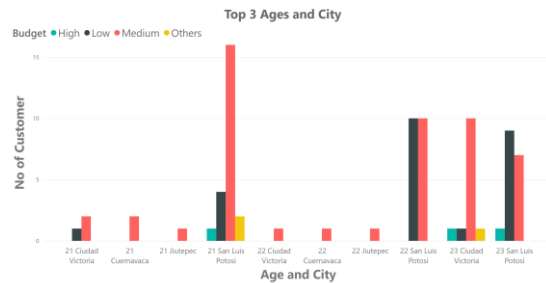
	Name	Smoking_Allowed	Alcohol_Service	Area	Franchise	Parking
▶	Cafeteria Y Restaurant El Pacifico	Smoking Section	Wine & Beer	Closed	No	Public
	La Cantina Restaurante	No	Full Bar	Closed	No	None
	Tortas Locas Hipocampo	No	None	Closed	No	Public
	Vips	No	Full Bar	Closed	Yes	Yes
	Puesto De Tacos	No	None	Open	No	None

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Business Problems

Q5) What are the Consumer Demographics? Does this indicate a bias in the data sample?

- Consumer Demographics include Age, City and Budget of Consumer.
- Through graph, the bias we find out is that **San Luis Potosi** is the only city where maximum 21 age group people has medium budget and 23 age group has relatively dominant low budget whereas in **Ciudad Victoria**, lesser 23 age group people earns medium budget than Potosi. People having high budget is no where dominant in any city. This indicates biasness in Consumer Demographics.

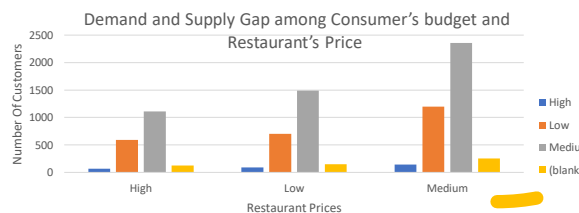


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Business Problems

Q6) Are there any Demand & Supply gaps that you have analyzed so far?

- Supply here indicates price of restaurant providing cuisine (either high, medium and low) and Demand indicates budget consumer have by which consumer is opting for cuisine.
- Whichever restaurants have medium price, maximum "medium" budget people are opting for it. Here it is narrow demand and supply gap between budget and price.
- In low price restaurants, there is wider gap between demand and supply which encourages low price restaurants' business.
- In High price restaurants, High budget people are not opting for them than medium budget people which discourages high restaurants' business expectations, shows wider gap.



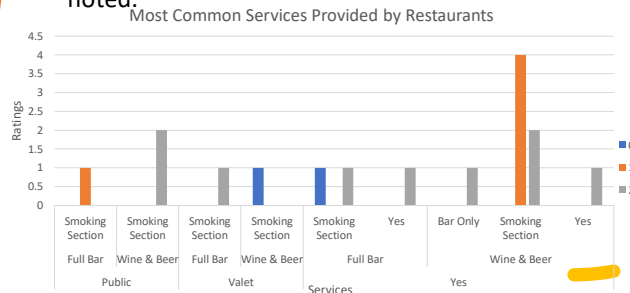
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Business Problems

Q7) If you were to invest into Restaurants, which Characteristics would you be looking for?

PART OF RECOMMENDATION AS WELL

- By our findings we first check through ratings
- 1. We analyze here restaurants who render alcohol, smoking and parking services all and are being rated accordingly. We have deducted that those restaurants that are rendering Smoking Section, Wine and Beer and allowing public parking service are highly rated.
- Investors must look for this if they are looking to invest in restaurants rendering all services. These characteristics can be noted.



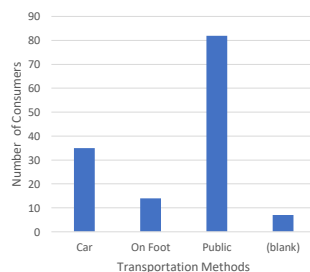
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Business Problems

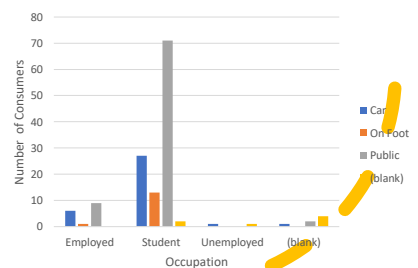
Q8) What kind of transportation does Consumers used to reach Restaurants, what are their ages and occupation?

- We found out most of consumers using public transport around 82 consumers out of 138.
- Consumers are in wide range of ages from 18 to 82, out of which most of consumers are 23 years old and Most consumers are students, 113 out of 138.
- Students use Public Transport to reach restaurants.

Number Of Consumers use different transportation methods



Number of Consumers who have similar occupation and use similar Transportation Method

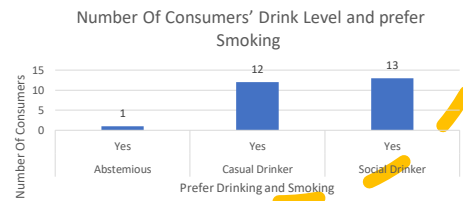
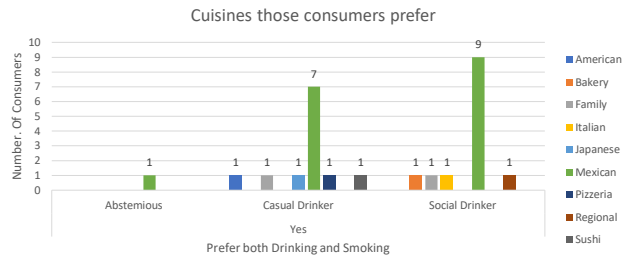


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Business Problems

Q9) How many Consumers prefer both drinking and smoking in Restaurants? Among them which kind of Restaurants Cuisine do they prefer?

- There are 26 out of 138 consumers who prefer both smoking and drinking, also among 26 most prefer Mexican Cuisine.

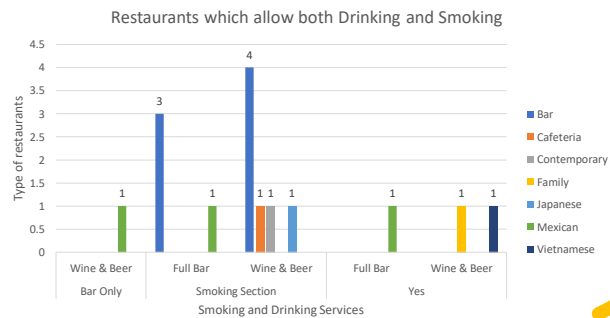


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Business Problems

Q10) What kind of Restaurants allows smoking and drinking services in their Restaurants and what are their Preferred Cuisines?

- There are 15 restaurants out of 130 who allows both smoking and drinking and most of restaurants are Bars.

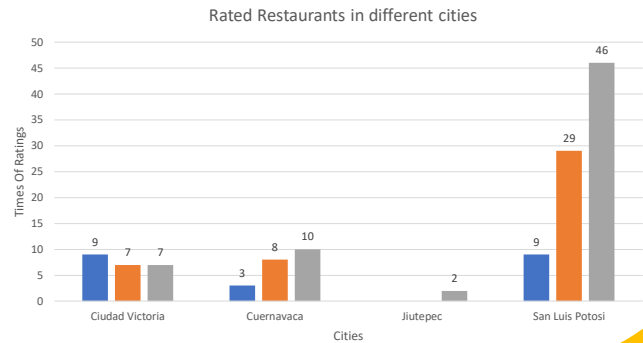


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Business Problems

Q11) Which City has highest number of Restaurants and which of them are highly rated?

- Most of restaurants are located in **San Luis Potosi**; 84 out of 130, and out of 84 restaurants 46 restaurants that are rated 2 > 1 > 0.
- Point to be noted (**investing**).

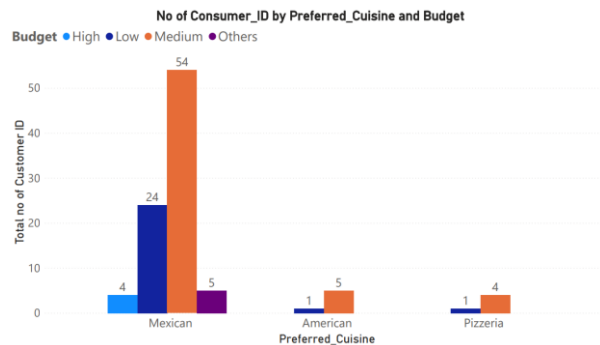


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Business Problems

Q12) How much do Consumers prefer spending in Restaurants and what kind of Cuisine?

- Graph shows top 3 cuisine in all restaurants in which Mexican is on trend and customers preference is in medium budget.

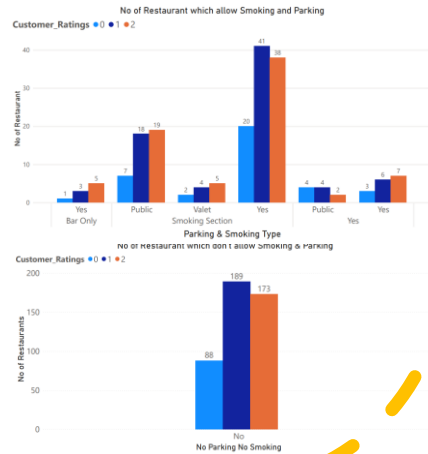


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Business Problems

Q13) Which restaurant allowed smoking and allowed parking their consumer rating vs Which restaurant doesn't allow smoking and doesn't allow parking their consumer rating?

- First graph shows trend where all 3 parking and smoking service available in restaurants where those restaurants allowing 'Smoking Section' and Parking are medium rated(1) and by narrow margin dominating.
- Second graph shows restaurants who don't allow smoking and parking, in which medium rated restaurants are on top.



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Suggestions

Recommendations;

- We have added recommendations in terms of investing in Q7 (We can have look again)
- Those restaurants which are being rated low, they need to work on the cuisines which are now a days preferences of consumers. **If they are allowing smoking and alcohol services then they must work on their service rating than Food Rating.**
- According to trends, those who are rendering Smoking and Drinking services **they should allot valet parking** which standardize restaurant for higher class.
- If the restaurants are not allowing any of these services then **they must focus on food quality rather than service quality**, they must have open area for consumers for interaction with environment and enjoy their meal.
- But preferably, it is to mention that those restaurants which allow smoking and alcohol services are not on favourable side because **they are missing the trick of attracting variety of consumers to their restaurant because due to allowing those services, you are limiting your consumers.**
- Hope this helps Restaurant Owners of Mexico to maximize their profit.

THANKYOU

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