ZOMATO

MARKETING REPORT

Presented By

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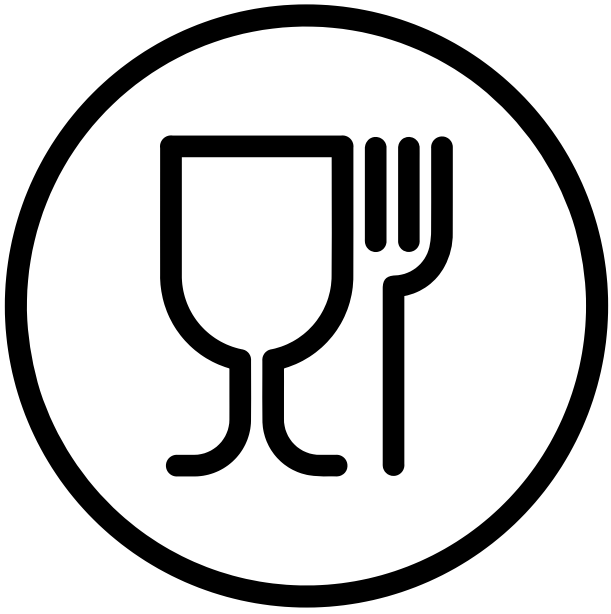
INDEX

EXCECUTIVE SUMMARY

This report explores India's ever-changing food scene, where people's food preferences change quickly, and competition is tough. We used data analysis to figure out what kinds of food people like and how they choose where to eat in different parts of India. Our main goal was to create a special marketing plan that works well in different areas and for different types of customers. We did this by looking at data from the "zomato_restaurants_in_India.csv" file, and we made sure the data was clean and analyzed it carefully.

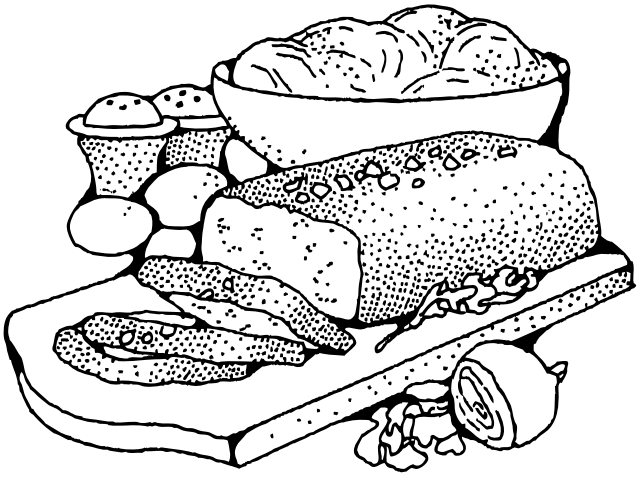
We found out interesting things like what people like to eat in different regions, what they prefer, and who our competitors are. With these findings, we created a plan for marketing that focuses on specific areas, types of customers, and ways to stand out from our competitors. Our plan includes promotions, adjusting prices, and coming up with creative ways to connect with our customers. We used pictures and charts to make it easier to understand. This report gives our restaurant chain a strategy based on data that can change with what customers want and helps us succeed in the competitive Indian food market. Our journey through data analysis has been our guide to success in the world of food.



INTRODUCTION

In the world of food that keeps changing, this report is like an adventure. We're using Exploratory Data Analysis (EDA) to understand what people like to eat and how they order food in different parts of India. Our main goal is to use data from the "zomato_restaurants_in_India.csv" dataset to help us make smart choices. We'll clean up the data, look at how things are spread out, understand what people in different places like, and see what other restaurants are doing.

Our big aim is to make a marketing plan that works in different areas and for different types of customers. We want our restaurant chain to stand out and do well in India's busy food market. To help us understand better, we'll use pictures and graphs. Come along as we explore India's food world, find hidden opportunities, and plan how to make our restaurant successful in this ever-changing industry.



DATA CLEANING AND PREPARATION

MISSING VALUES:

ADDRESS: The "address" column has 134 missing values. To address this, we filled the missing values with "Unknown" to ensure data completeness.

ZIPCODE: The "zipcode" column has a substantial number of missing values, totaling 163,187. To maintain data quality and considering the large number of missing entries, we decided to drop this column from the dataset.

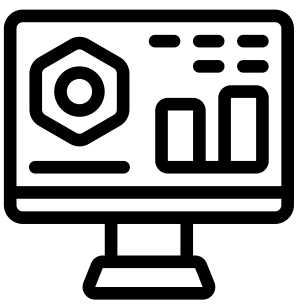
CUISINES: The "cuisines" column is missing in 1,391 rows. To maintain the integrity of the data, we filled these missing entries with "Unknown."

TIMINGS: The "timings" column has 3,874 missing entries. To maintain data completeness, we filled the missing values with "Not Available."

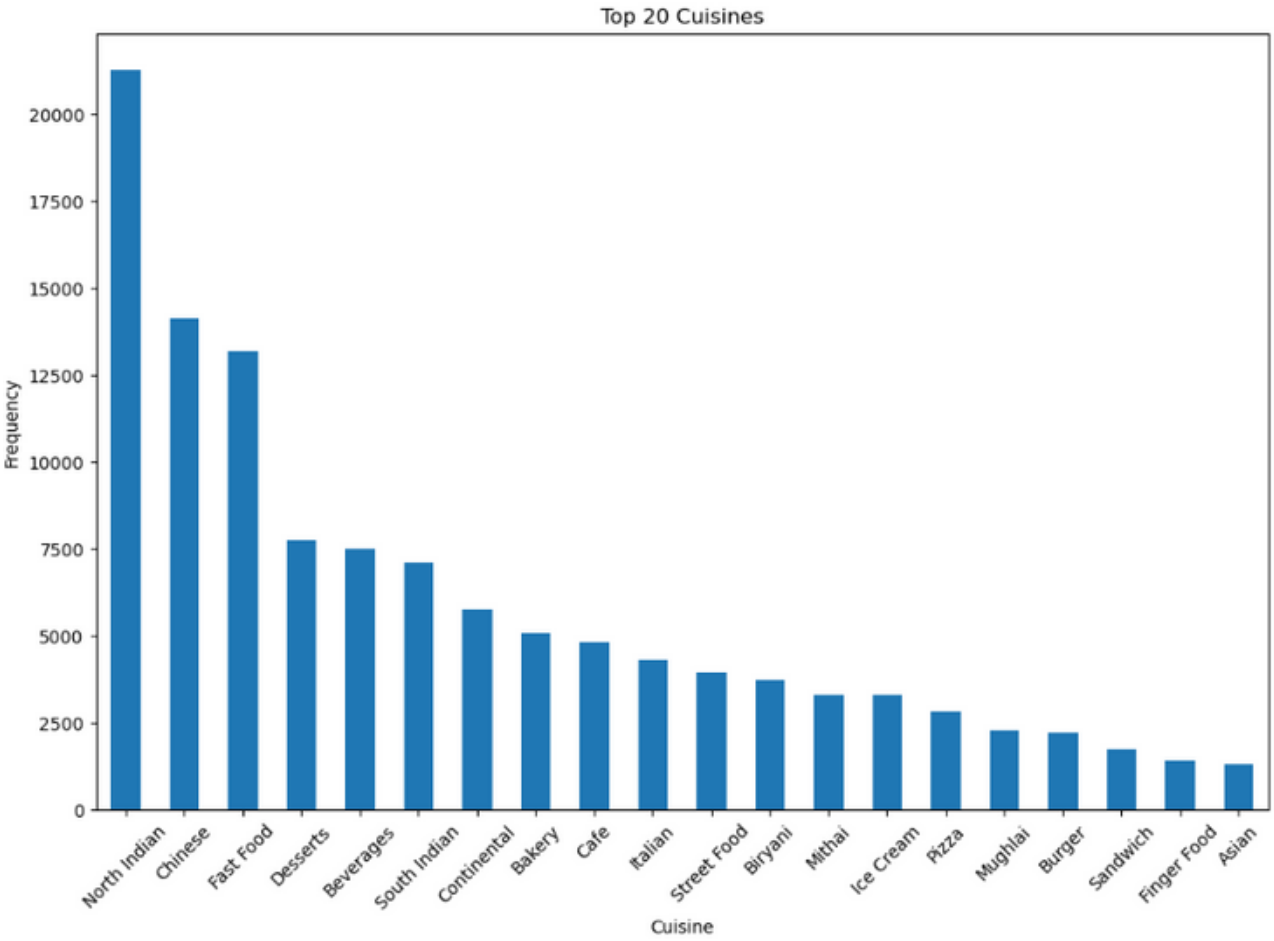
OPENTABLE_SUPPORT: The "opentable_support" column has 48 missing values. We filled these missing values with the mode (the most frequently occurring value) to retain data consistency.

DUPLICATE ROWS:

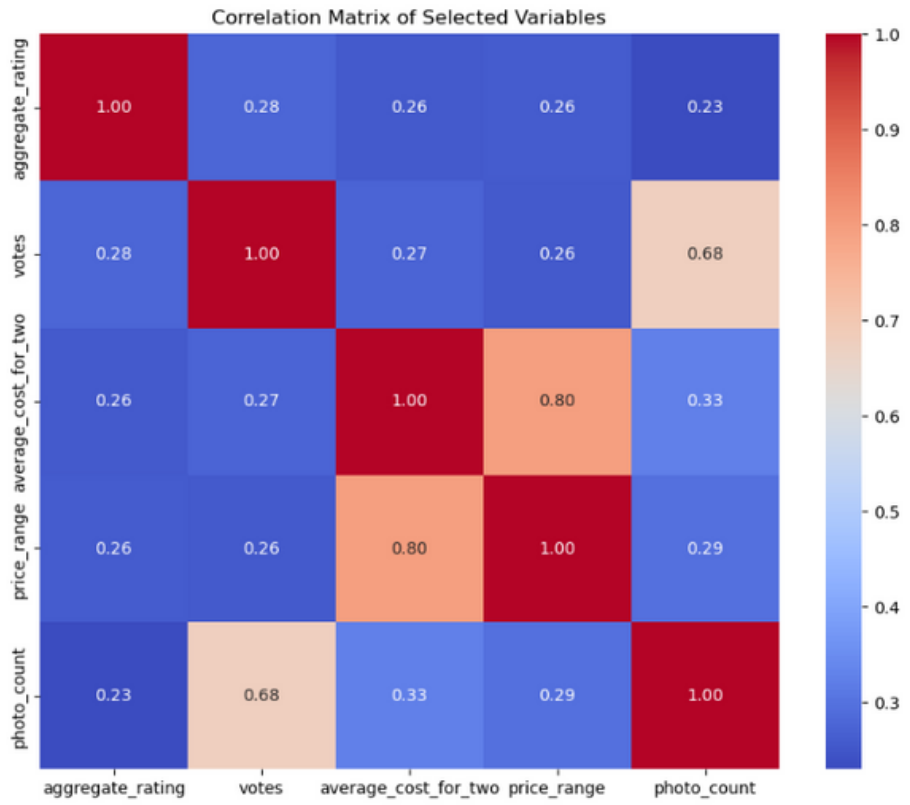
We identified a total of 151,527 duplicate rows in the dataset. To ensure the accuracy of our analysis, we removed these duplicate entries from the dataset, resulting in a cleaner and more reliable dataset for further exploration and insights.



INSIGHTS AND MARKETING STRATEGIES



The bar chart highlights the most popular cuisines in a restaurant dataset, showing North Indian, Chinese, and Fast Food as the most frequently offered. These popular choices suggest a competitive market with high customer demand. Less common cuisines like Ice Cream, Mughlai, and Finger Food appear less often, indicating potential market niches. For restaurant chains, there's an opportunity to capture a broad audience by offering popular dishes or to carve out a unique space with less common cuisines. The chart is a useful tool for strategizing menu and marketing direction.



The heatmap visualizes the correlation matrix of selected variables in a restaurant dataset, offering insights into how different aspects of restaurant data relate to each other.

From the heatmap, we can observe that:

Ratings and Votes: There's a moderate positive correlation between aggregate_rating and votes. This suggests that higher-rated restaurants tend to receive more votes, which could indicate that customers are more inclined to vote for restaurants they had a good experience with.

Price and Popularity: average_cost_for_two and price_range have a very strong positive correlation, as expected, since they are both measures of the restaurant's price level. Interestingly, both show a moderate correlation with votes but not with aggregate_rating, implying that while pricier restaurants might get more votes (possibly indicating higher customer engagement or a larger customer base), it doesn't necessarily mean they have higher ratings.

Photo Count as a Popularity Indicator: photo_count has a strong positive correlation with votes, which could suggest that the number of photos posted by customers is a good indicator of a restaurant's popularity.

In short, this heatmap tells a story of interconnected factors where customer engagement (votes and photo count) is more closely tied to the restaurant's popularity and price level rather than directly to its aggregate rating. It indicates that while quality (as indicated by ratings) is important, the social and economic aspects (reflected by votes, photo count, and price) play a significant role in the restaurant's overall popularity.

The bar chart shows average restaurant ratings across top cities, with most cities scoring between 3 and 3.5, suggesting consistent customer satisfaction. Mumbai and New Delhi slightly lead, which may reflect their competitive and quality-driven dining markets. Goa and Ahmedabad are a bit lower, hinting at diverse dining experiences or different customer expectations. These nuances highlight opportunities for restaurants to tailor experiences or address gaps in the market.

```
city       cuisines
Agra       North Indian                       120
           Mithai                              53
           Fast Food                           40
Ahmedabad  Street Food                         82
           North Indian                        79
                                              ...
Vizag      Desserts                            30
           North Indian, Chinese, Biryani      22
Zirakpur   North Indian                        22
           North Indian, Chinese                7
           Juices                               5
Name: count, Length: 297, dtype: int64
```

The dataset indicates that North Indian cuisine is a popular choice across various cities, with Agra and Zirakpur showing a strong preference for it. Ahmedabad favors street food, while Vizag has a diverse palate, including a taste for desserts and biryani. This information could guide targeted culinary offerings and marketing campaigns, pinpointing opportunities for introducing or emphasizing certain cuisines in these locales.

		region	cuisines	counts
region				
Central	732	Central	North Indian	895
	417	Central	Fast Food	331
	766	Central	North Indian, Chinese	267
East	2097	East	North Indian, Chinese	295
	2038	East	North Indian	282
	1761	East	Fast Food	210
North	4567	North	North Indian	2307
	3800	North	Fast Food	722
	4634	North	North Indian, Chinese	626
Northeast	5891	Northeast	North Indian, Chinese	52
	5885	Northeast	North Indian	32
	5795	Northeast	Fast Food	29
South	8977	South	South Indian	1145
	6309	South	Bakery	450
	8344	South	North Indian	298
West	11382	West	North Indian	773
	10578	West	Fast Food	606
	12355	West	Street Food	411

The data shows the count of popular cuisines in different regions of India. North Indian cuisine is the most prevalent across all regions. Fast Food is also widely popular in the Central, East, North, and West regions. The East region shows a significant inclination towards North Indian and Chinese cuisines. The Northeast appears to have a lesser variety of popular cuisines, with North Indian and Fast Food being relatively low in count. The South region has a notable count for Bakery items, while Street Food is also a common choice in the West. This suggests that while North Indian food is universally favored, regional preferences for other cuisines like Fast Food, Chinese, Bakery, and Street Food vary, presenting tailored opportunities for restaurant offerings and marketing strategies.

		region	individual_cuisines	counts
region				
Central	61	Central	North Indian	2599
	29	Central	Fast Food	1833
	20	Central	Chinese	1444
East	145	East	North Indian	1864
	105	East	Chinese	1703
	112	East	Fast Food	1069
North	256	North	North Indian	7719
	212	North	Fast Food	4320
	201	North	Chinese	4255
Northeast	306	Northeast	Chinese	322
	337	Northeast	North Indian	308
	311	Northeast	Fast Food	193
South	430	South	North Indian	4276
	450	South	South Indian	4006
	376	South	Chinese	3517
West	542	West	North Indian	4493
	500	West	Fast Food	3350
	492	West	Chinese	2898

The data reflects a customer preference analysis across different regions in India, based on the frequency of cuisines. North Indian cuisine is the top preference in all regions. Fast Food follows closely in popularity, especially in the Central and North regions. In the Northeast, Chinese cuisine also emerges as a favorite, whereas South and West regions show a varied taste with South Indian and Chinese cuisines respectively being well-liked. The consistency of North Indian cuisine's popularity suggests a widespread appeal, while regional variations indicate specific tastes that could influence restaurant menu planning and marketing campaigns.

	aggregate_rating	price_range	votes
aggregate_rating	1.000000	0.257688	0.277531
price_range	0.257688	1.000000	0.255673
votes	0.277531	0.255673	1.000000

The correlation matrix provided shows the relationships between aggregate ratings, price range, and votes for restaurants. Aggregate rating has a mild positive correlation with both price range (0.257688) and votes (0.277531), suggesting that higher-rated restaurants tend to be slightly more expensive and slightly more popular. Price range and votes also have a mild positive correlation (0.255673), indicating that restaurants with a higher price range tend to get more votes. These correlations, while positive, are not strong, implying that other factors may also play significant roles in influencing these variables.

COMPETITIVE ANALYSIS

The dataset presents a competitive analysis of restaurants across different regions, categorized by cuisine and price range. It highlights the prevalence of North Indian cuisine in the Central and North regions, irrespective of price, pointing to its widespread popularity. Fast Food is also a common choice across various regions, suggesting its broad appeal. Notably, the combination of North Indian and Chinese cuisines appears frequently, indicating a consumer preference for this fusion. The dataset can serve as a strategic tool for restaurants to understand their competition and identify prevalent market trends, potentially informing decisions on menu offerings and pricing strategies to gain a competitive edge.

MARKETING ANALYSIS

Underrepresented Cuisines in Each Region:

	region	individual_cuisines	counts
12	Central	British	2
15	Central	Burmese	1
17	Central	Cafe Food	1
18	Central	Cantonese	1
19	Central	Charcoal Chicken	1
..	...	...	...
537	West	Mongolian	2
540	West	Naga	2
543	West	Odia	2
550	West	Raw Meats	2
562	West	Sri Lankan	1

[118 rows x 3 columns]

Potential Price Range Gaps in Each Region:

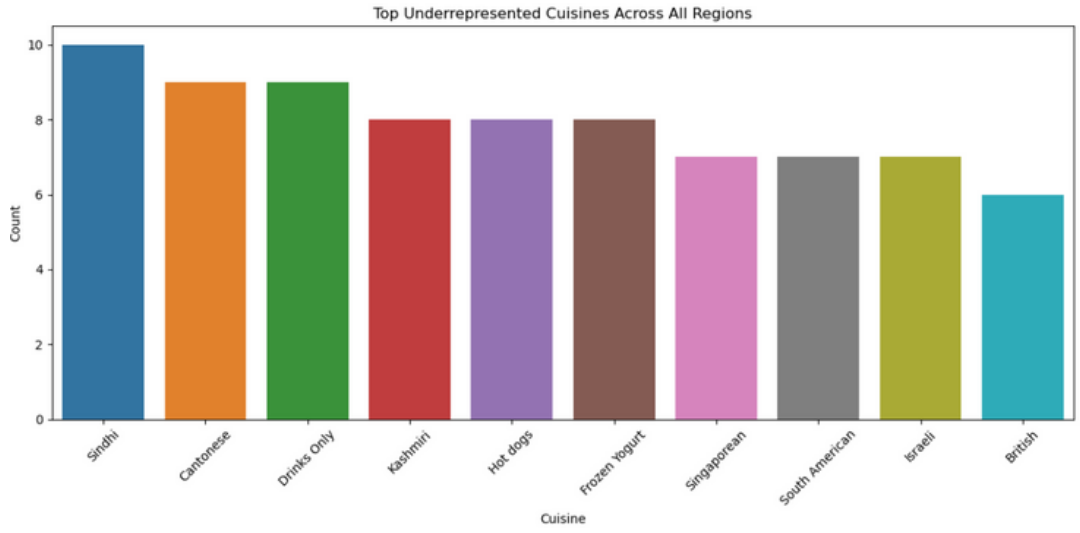
	region	price_range	counts
3	Central	4	141
7	East	4	109
12	Northeast	1	370
13	Northeast	2	360
14	Northeast	3	158
15	Northeast	4	28

Market Gap Analysis conducted on a dataset, on Zomato, to identify underrepresented cuisines and potential price range gaps in different regions. The analysis uses the lower quartile to set a threshold for identifying gaps.

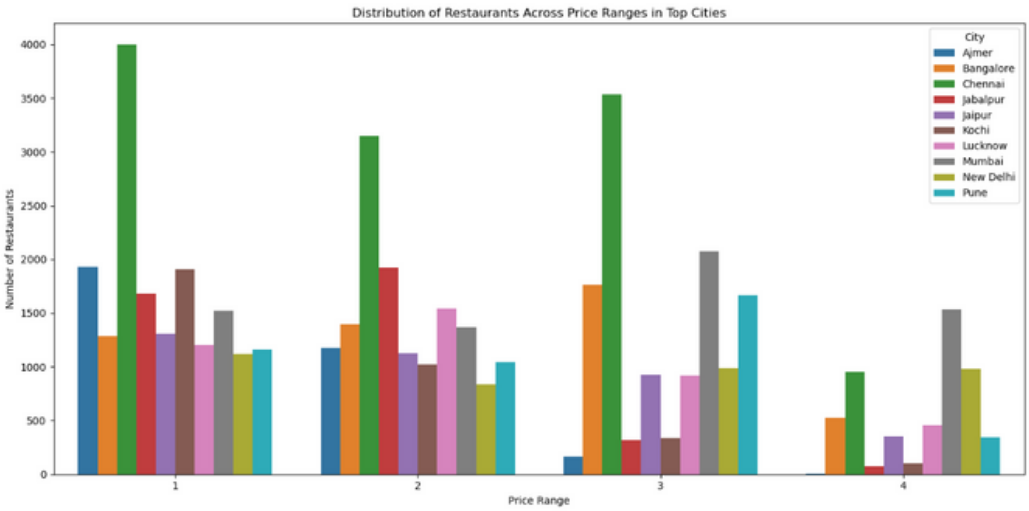
Underrepresented Cuisines: Certain cuisines like British, Burmese, and Cafe Food in the Central region, and Oats and Naga in the West, are listed as underrepresented based on their count falling below the lower quartile threshold.

Potential Price Range Gaps: The analysis also identifies potential gaps in each region's market based on price ranges. For instance, in the Central region, there are 149 instances where the price range category falls below the lower quartile threshold, suggesting a possible opportunity to introduce new restaurants within this price range.

This gap analysis can inform strategic decisions for restaurant chains looking to expand in specific regions by offering underrepresented cuisines or filling price range gaps in the market.



The bar chart showcases the top underrepresented cuisines across all regions. Sindhi cuisine leads, followed closely by Cantonese and Drinks Only, with other cuisines like Kashmiri, Hot Dogs, Frozen Yogurt, Singaporean, South American, Israeli, and British also appearing. This diversity suggests opportunities for restaurants to introduce or focus on these cuisines to meet untapped customer demand. The visualization effectively conveys where the market potential lies for unique and varied culinary experiences.



The bar chart visualizes the distribution of restaurants across different price ranges in top Indian cities. Each bar represents the number of restaurants in a specific price range, color-coded by city. The x-axis denotes four price ranges, likely representing different tiers of pricing from budget to premium. The y-axis shows the number of restaurants in each category.

From the chart, it's evident that:

Price range 1 is popular across all cities, suggesting a large number of budget-friendly dining options.
Price range 2 also has a significant presence, indicating a good number of mid-range restaurants.
The number of restaurants in price ranges 3 and 4 drops considerably, hinting at fewer upscale dining choices.
Cities like Mumbai and New Delhi, which might be considered more affluent, show a relatively higher number of restaurants in the upper price ranges compared to other cities.
Overall, the chart provides a comparative overview of the affordability of dining out in these cities, useful for market analysis or strategic planning for restaurant chains.

Some strategies for targeting different regions, focusing on specific customer segments, and differentiating from competitors:

1. Targeting Different Regions:

Central Region: Introduce or emphasize British, Burmese, and Cafe cuisines, as they are currently underrepresented. An investment in unique cafe concepts or authentic ethnic restaurants could fill this gap.

Western Region: Explore the introduction of Oats-based offerings and Naga cuisine, which may appeal to health-conscious consumers and those looking for novel culinary experiences.

2. Focusing on Specific Customer Segments:

Health-Conscious Segment: For regions where health-conscious trends are on the rise, create a menu centered around healthy cuisines like Oats. Partner with fitness centers and offer joint promotions to tap into this market.

Ethnic Food Enthusiasts: In areas lacking in ethnic diversity like Naga cuisine in the West, target customers interested in exploring new flavors with authentic dining experiences and cultural events.

3. Differentiating from Competitors:

Unique Dining Experiences: Offer immersive experiences, such as themed dinners, cooking classes, and live cultural performances, which competitors may not provide.

Customization and Personalization: Use a build-your-own meal model for customers to personalize their dishes, catering to individual tastes and dietary preferences.

4. Promotional Tactics:

Introductory Offers: For new cuisines, provide limited-time offers or tastings to attract early adopters.

Loyalty Programs: Implement a rewards system that encourages repeat visits and word-of-mouth referrals.

Special Events: Host food festivals featuring underrepresented cuisines to generate buzz and interest.

By using a data-driven approach and supporting it with compelling visuals, the marketing strategies can be effectively communicated to stakeholders and implemented to capture market opportunities. Remember, the success of these strategies relies on thorough market research and understanding customer preferences in each region.

CONCLUSION

The extensive analysis of Zomato's restaurant data across various Indian cities reveals distinct regional dining preferences and market dynamics. North Indian cuisine dominates across the board, suggesting a universal appeal, while underrepresented cuisines present niche market opportunities. The distribution of price ranges indicates a concentration of budget and mid-range eateries, with luxury dining being less common, highlighting potential growth areas in the upscale market segment. The data also underscores the competitive landscape, with cities like Mumbai and New Delhi showcasing a diverse and vibrant dining scene. These insights could guide strategic decisions for restaurant owners and investors looking to capitalize on existing trends or fill gaps in the market.