

Final Report: Cognifyz Data Analysis Internship

Introduction

This report presents the data analysis performed as part of the **Cognifyz Data Analysis Internship**. The dataset consists of restaurant-related data, including details on cuisines, ratings, price ranges, online delivery, and customer votes. The tasks were categorized into three levels, each progressively more complex, providing valuable insights into restaurant trends.

Level 1: Basic Analysis

1. Top Cuisines Analysis

- Identified the top 3 most common cuisines:
 - **North Indian** (41.46%)
 - **Chinese** (28.63%)
 - **Fast Food** (20.79%)

2. City Analysis

- **Most Restaurants:** New Delhi (5473 restaurants)
- **Highest Average Rating:** Inner City (4.9)

3. Price Range Distribution

- **Price Range 1:** 46.53%
- **Price Range 2:** 32.59%
- **Price Range 3:** 14.74%
- **Price Range 4:** 6.13%

4. Online Delivery Analysis

- **Restaurants Offering Online Delivery:** 25.66%
 - **Average Rating (With Online Delivery):** 3.25
 - **Average Rating (Without Online Delivery):** 2.47
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Level 2: Intermediate Analysis

5. Restaurant Ratings Analysis

- **Most Common Rating:** 0.0 (Many unrated restaurants)
- **Average Votes per Restaurant:** 156.91

6. Cuisine Combination Analysis

- **Most Common Cuisine Combination:** North Indian, Chinese (511 restaurants)

- **Highest Rated Cuisine Combination:** American, BBQ, Sandwich (4.9 rating)

7. Geographic Analysis

- A scatter plot of restaurant locations was generated to visualize clustering.

8. Restaurant Chains Analysis

- **Most Popular Chain:** Cafe Coffee Day (83 locations)
 - **Highest Rated Chain:** Talaga Sampireun (4.9 rating)
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Level 3: Advanced Analysis

9. Rating Text Analysis

- Identified the most common rating categories instead of reviews.

10. Votes Analysis

- **Highest Voted Restaurant:** Found
- **Lowest Voted Restaurant:** Found
- **Votes vs. Ratings Correlation:** Found and visualized with scatter plot.

11. Price Range vs. Online Delivery & Booking

- **Higher-priced restaurants are more likely to offer online delivery & table booking.**
 - Bar charts were used to visualize the trends.
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Conclusion & Key Insights

- **North Indian and Chinese cuisines dominate** restaurant trends.
- **Higher-rated restaurants** tend to have more votes.
- **Online delivery affects restaurant ratings**, with delivery restaurants having better ratings.
- **Restaurant chains** maintain high popularity and reputation.
- **Higher-priced restaurants** offer better services like online delivery & table booking.

This analysis provides actionable insights that can help restaurant owners optimize their services and customer engagement strategies.

End of Report