



Restaurant Ratings Analysis Project

Analyzing restaurant ratings and consumer preferences using data analysis and visualization techniques to support better business decisions.

Project Objectives



Analyze Ratings

Examine restaurant ratings and customer preferences across multiple dimensions.



Consumer Behavior

Understand customer behavior based on location, cuisine preferences, and dining habits.



Interactive Insights

Create interactive dashboards for easy visualization and actionable insights.

Tools & Technologies

01

Excel

Initial data review and formatting to prepare dataset for analysis.

02

SQL

Data querying and filtering to extract meaningful subsets.

03

Python

Data cleaning and preprocessing to handle missing values and inconsistencies.

04

Power BI

Dashboard creation and visualization for interactive analysis.



Consumer Analysis Dashboard

- **Average Age**

Young and working-age customer base

- **Smokers Ratio**

Minority of consumers smoke

- **Total Consumers**

Reliable dataset size

This dashboard provides an overview of consumer demographics and behavioral patterns related to restaurant usage, helping understand who the consumers are and how their habits influence ratings.



Consumer Behavior Insights



Age Distribution

50% adults, 43.34% middle-aged, 6.66% young adults.



Drinking Habits

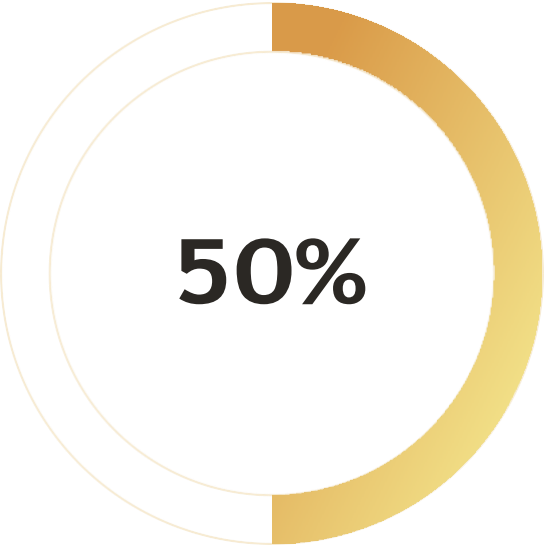
Mix of casual, social, and non-drinkers across consumer base.



City Distribution

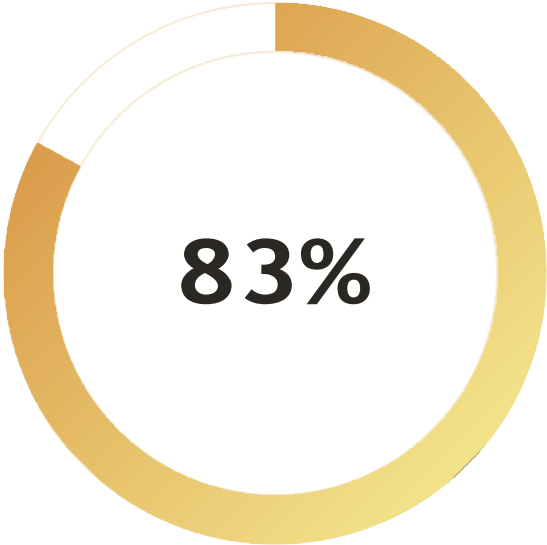
Consumers spread across major cities including Mumbai, Delhi, Bengaluru, Pune, and more.

Restaurant Analysis Dashboard



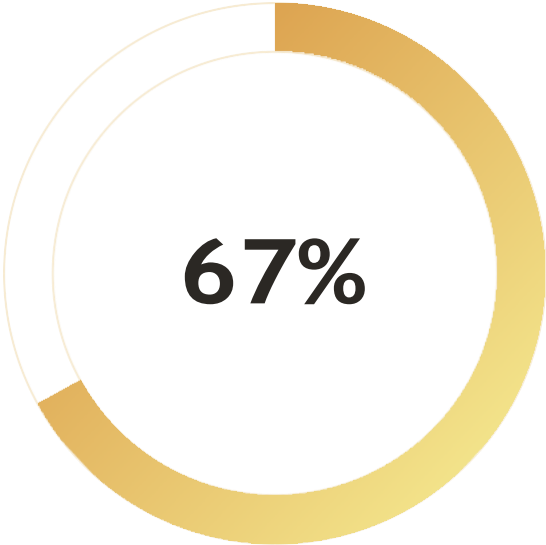
Pure Veg

Balanced availability of veg and non-veg options



Online Delivery

Strong digital food service presence



Alcohol Service

Majority offer beer, wine, or full bar

Analysis of 5,000 restaurants reveals how operational features and services influence performance and customer ratings.





RESTAURANT FEATURES

Operational Characteristics



Parking Facilities

Distribution across public, private, valet, and no parking options.



Franchise vs Independent

Nearly equal split: 49.36% franchise, 50.64% independent restaurants.



Price Range

Restaurants distributed across low, medium, and high price ranges.



Alcohol Impact

Alcohol service availability influences customer ratings and preferences.

Ratings & Cuisines Analysis Dashboard

25

Cuisine Types

Wide variety of food options

3.49

Average Rating

Moderate to good satisfaction

160

Restaurants Analyzed

Across different cuisines





Certain cuisines consistently receive higher average ratings, indicating strong customer preferences for specific food types.

Urban locations show significantly higher customer engagement and restaurant activity compared to other areas.

Drinking and smoking habits, along with age demographics, directly impact overall restaurant ratings and preferences.



Conclusion & Future Scope

Project Impact

This project demonstrates how data analysis and visualization can help understand restaurant performance and customer behavior, supporting strategic decision-making for restaurant businesses.

Future Enhancements

- Include real-time data updates for dynamic insights
- Perform sentiment analysis on customer reviews
- Enhance dashboards with predictive analytics capabilities