Restaurant Success Drivers: Analytical Report

Prepared for: Strategy and Executive Leadership Team

Data Sources: restaurant.csv, orders.csv, users.csv

Data Cleaning: Google Sheets

Visualization Tool: Tableau

Link to Project Decomposition: Decomposition - Final Project

Project Objective: To uncover the key drivers of restaurant popularity, customer favorability, order volume, and revenue by analyzing restaurant attributes and customer behavior.

1. Project Overview

This project explores what makes restaurants successful by examining trends in customer ratings, popularity, pricing, order patterns, and demographic responses. By combining three datasets—restaurant.csv, orders.csv, and users.csv—we identified insights that can inform pricing strategies, customer targeting, marketing campaigns, and operational planning.

Data Preparation

All raw data was cleaned and merged using **Google Sheets** prior to Tableau visualization. The cleaning process included standardizing formats, removing duplicates, handling nulls, and creating relational joins between datasets.

For detailed cleaning steps, refer to the documentation:

Google Sheets Data Cleaning Process

2. Research Framework

Primary Research Question

Which factors most influence customer ratings and restaurant popularity, and do these same factors drive higher order volume and revenue?

Supporting Questions

- How do pricing, cuisine, and geographic location relate to popularity and purchasing behavior?
- Are the highest-rated restaurants also the most profitable?
- How do user demographics (e.g., gender, education, marital status) shape restaurant preferences?

Hypotheses

- 1. Cuisine and location are more influential than price in determining popularity.
- 2. Cost level alone is not predictive of customer satisfaction.
- 3. Demographics significantly impact restaurant perceptions and spending behavior.

3. Summary of Key Insights

3.1 Popularity and Financial Success

- Highly rated restaurants (e.g., *Sunshine Shake*) rank well in popularity but are not always top revenue generators.
- Popularity is not directly proportional to financial performance, especially in the high-cost segment.

Conclusion:

Customer perception is multifaceted. Location, experience, and value delivery are often more important than rating alone.

3.2 Seasonal Trends

- Spring (January–May): Sales decline steadily.
- **July:** Sharp spike in both average sales and quantity.
- August-September: Post-peak decline.
- October-December: Recovery and steady growth resumes.

Conclusion:

Sales patterns are highly seasonal, with clear opportunities to optimize marketing and resource planning around peak months.

3.3 Geographic and Currency Trends

- Top-performing cities: Alkapuri (Vadodara) and Alwarpet (Chennai).
- Presence of USD transactions suggests some international or digital platform engagement.

Conclusion:

Urban economic centers offer high sales potential and should be prioritized in strategic planning.

3.4 Customer Demographics

- **Favorability:** Female customers, particularly those who are married and well-educated, tend to give higher ratings.
- **Spending:** Male customers, especially those who are married and educated, drive the highest revenue.

Conclusion:

Behavioral trends are strongly influenced by demographics, reinforcing the need for segmented customer strategies.

3.5 Price vs. Popularity

- The 20 most expensive restaurants (avg. ₹4,000–₹6,000) consistently score low on popularity, clustering near zero.
- Restaurants with an average cost of ₹500 show a wide range of favorability, indicating that other factors beyond cost influence customer sentiment.

Conclusion:

A high price does not necessarily equate to high favorability. Value perception and experience are essential to customer satisfaction.

4. Strategic Recommendations

4.1 Demographic Targeting

Focus loyalty and acquisition strategies on **married**, **educated male customers**, while tailoring engagement toward **educated female audiences** with quality- and experience-driven messaging.

4.2 Seasonal Campaign Planning

Concentrate marketing efforts during **July** and **October–December**, with targeted retention strategies to mitigate **spring-season declines**.

4.3 Location-Based Expansion

Expand or intensify operations in **Vadodara, Chennai**, and other similar cities, using demographic and sales data as a guide.

4.4 Premium Experience Optimization

For high-cost restaurants with poor ratings, improve the customer journey by investing in service quality, ambiance, and exclusive experiences to justify the pricing.

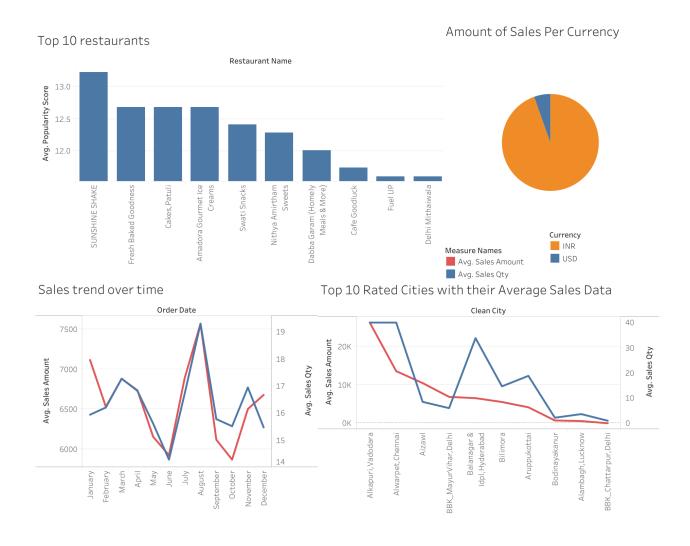
4.5 Promote Value and Experience

Deprioritize cost in positioning. Instead, emphasize **quality, consistency, and service**, which are stronger predictors of popularity and return visits.

5. Visual Dashboards

5.1 Dashboard 1

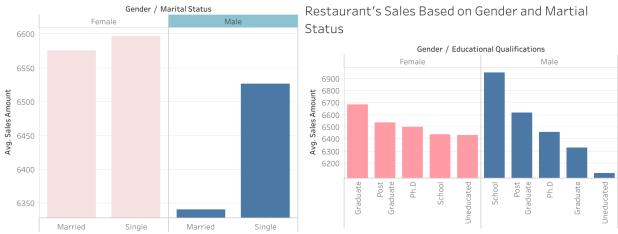
Dashboard 1 illustrates seasonal sales trends, city-wise performance, and top-rated restaurants.



5.2 Dashboard 2

Dashboard 2 explores how gender, marital status, and education influence ratings and spending behavior.

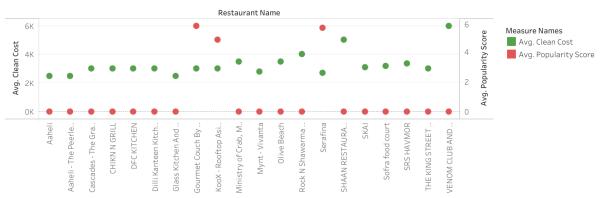




5.3 Dashboard 3

Dashboard 3 evaluates cost versus popularity, highlighting the disconnect between premium pricing and customer favorability.

The Favorability of the Top 20 Most Expensive Restaurant



Restaurants' Favorability when Average Cost is \$500

