

## **The Language Behind Ratings: How Yelp Reviews Influence a Restaurant's Success**

Imagine you're a restaurant owner, watching your foot traffic dwindle and wondering how to turn things around. You're at a crossroads: either identify what's missing and fix it, or face the harsh reality of closing your doors for good. Your mission is clear, but it won't be easy—analyze your Yelp reviews to uncover what drives new customers through the door and what keeps your most loyal patrons coming back.

### **The Scenario**

In today's digital age, online reviews are a key source of information for consumers, particularly when they are unfamiliar with a restaurant. One of the most influential platforms in this regard is Yelp, where millions of users share their dining experiences. For restaurant owners and managers, understanding how their reviews translate into ratings and customer satisfaction can provide actionable insights for business improvement. The question is: what exactly in these reviews contributes to a high or low rating? By identifying the phrases, sentiments, and keywords that influence customer perceptions, restaurants can better tailor their offerings to meet customer expectations.

### **Objective**

The primary goal of this project is to analyze Yelp reviews for restaurants and extract key phrases and keywords that correlate strongly with restaurant ratings. Specifically, we will:

1. Perform sentiment analysis on Yelp reviews to classify customer feedback as positive, negative, or neutral.
2. Identify the phrases and keywords most frequently associated with higher ratings and those linked to lower ratings (e.g., food quality, service, ambiance).
3. Provide actionable recommendations for restaurant owners to enhance their customer satisfaction and improve ratings.

### **Deliverable**

The deliverable will be a comprehensive data analysis report that includes:

- A clear identification of keywords and phrases in Yelp reviews that are predictive of higher or lower ratings.
- Sentiment-driven visualizations highlighting the correlation between review content and ratings.
- A set of practical, data-driven recommendations for restaurant owners to improve customer experiences based on review content.
- Insights into how specific restaurant attributes (e.g., food, service, ambiance) are perceived by customers, influencing their overall satisfaction.