USER ENGAGEMENT ANALYSIS FOR RESTAURANT SUCCESS

BY SHIVAM GIRI

About YELP

Yelp is a web and mobile platform that functions as a crowd-sourced local business review site. Users can submit reviews, photos, and tips about businesses, while also browsing information and ratings left by others.

AGENDA

- Problem Statement
- Research Objectives
- Hypothesis
- Data Overview
- Analysis and Findings
- Recommendations

Problem Statement

In a competitive market like the restaurant industry, understanding the factors that influence business success is crucial for stakeholders.

Utilizing the Yelp dataset, this project aims to investigate the relationship between user engagement (reviews, tips, and check-ins) and business success metrics (review count, ratings) for restaurants.

Research Objectives

- 1. Quantify the correlation between user engagement (reviews, tips, check-ins) and review count/average star rating.
- 2. Analyze the impact of sentiment on review count and average star rating.
- 3. Time Trends in User Engagement.

Hypothesis

- Higher levels of user engagement (more reviews, tips, and check-ins) correlate with higher review counts and ratings for restaurants.
- Positive sentiment expressed in reviews and tips contributes to higher overall ratings and review counts for restaurants.
- Consistent engagement over time is positively associated with positively sustained business success for restaurants.

Data Overview

- This dataset is a subset of Yelp and has information about businesses across 8 metropolitan areas in the USA and Canada.
- The original data is shared by Yelp as JSON files.
- The five JSON files are business, review, user, tip and checkin.
- The JSON files are stored in the database for easy retrieval of data.

Analysis & Findings

- Out of 150k businesses, 35k are restaurants business and are open.
- Table showing distribution of business success metrics (review count and average rating):