

Restaurant Ratings Analysis Project Report

Abstract :

This project focuses on analyzing restaurant ratings and consumer preferences using data analysis and visualization techniques. The goal is to identify key factors influencing restaurant ratings and customer behavior to support better business decisions.

Objective :

Analyze restaurant ratings and customer preferences.

Understand consumer behavior based on location, cuisine, and habits.

Create interactive dashboards for easy insights.

Dataset Description :

The dataset includes restaurant details, customer demographics, preferences, and ratings. It was cleaned and transformed before analysis to ensure accuracy and consistency.

Tools & Technologies Used :

Excel – Initial data review and formatting

SQL – Data querying and filtering

Python – Data cleaning and preprocessing

Power BI – Dashboard creation and visualization

Methodology :

The data was first cleaned using Python to handle missing values and inconsistencies. SQL was used to extract meaningful subsets of data. Finally, Power BI was used to design interactive dashboards for analysis.

Dashboard Overview :

The Power BI dashboard includes consumer analysis, restaurant performance, rating trends, and preference-based insights. Filters and slicers improve user interaction.

Key Insights :

Certain cuisines receive higher average ratings.

Urban locations show higher customer engagement.

Consumer habits impact overall restaurant ratings.

Conclusion :

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

Future Scope:

Include real-time data updates

Perform sentiment analysis on customer reviews

Enhance dashboards with predictive analytics

