Restaurant Recommendation Analysis for Sanur, Kuta, and Denpasar Areas

A Data-Driven Restaurant Ranking for Strategic Local Recommendations

16 September 2025

ISSUED BY
DINI MURTI
Virtual Assistant, IT Project Manager, Writer
Email: hello.dinimurti@gmail.com
Website: www.dinimurti.com

Revision History

Version	Description of Change	Author	Date of Issue
1.0	Initial version	Dini Murti	16 September 2025

Table of Contents

1. Introduction

This report summarizes the methodology, process, and findings from a data-driven restaurant recommendation analysis focused on Sanur, Kuta, and Denpasar. The objective was to curate a reliable, location-based list of recommended restaurants using publicly available data from Google Maps, and rank them in a way that reflects both popularity and user satisfaction.

2. Objectives

The project was designed with the following objectives:

1. To curate a comprehensive list of restaurants in the targeted areas.
2. To develop a ranking system that balances both user ratings and volume of reviews.
3. To geographically classify each listing to enable location-based filtering and contextual recommendations.
4. To produce two outputs:
    a. A shortlist of the Top 10 Recommended Restaurants.
    b. A full list of all collected restaurants for further reference or expansion.

3. Methodology

3.1. Data Collection

1. Sourced 52 restaurant entries via Google Maps, prioritizing well-rated and popular venues across Sanur, Kuta, and Denpasar.
2. Extracted data points: Restaurant name, rating, number of reviews, address.

3.2. Initial Ranking

The first ranking iteration was based solely on raw rating scores (scale of 1–5).

3.3. Revised Ranking (Bayesian Average)

1. After stakeholder feedback, rankings were adjusted using the Bayesian Average Formula, which considers both:
    a. High rating scores
    b. Number of user reviews

2. This prevents low-review restaurants from appearing disproportionately high in the ranking.

3.4. Geolocation Classification

1. Manually reviewed and verified each restaurant's full address.
2. Categorized all 52 entries under Sanur, Kuta, or Denpasar based on:
    a. Subdistrict (Kelurahan)
    b. District (Kecamatan)
    c. City/Regency (Kota/Kabupaten)
    d. Postal Code

3.5. Output Format

Delivered in Google Sheets with two separate sheets:

1. **Sheet 1**: *Top 10 Restaurant Recommendations* (based on weighted ranking)
2. **Sheet 2**: *Complete Restaurant Listing* (with full address classification)

4. Key Findings

1. Restaurants with the highest ratings are not always the most reliable if the review count is low.
2. The Bayesian approach resulted in a more balanced and credible recommendation list.
3. Many restaurant addresses on Google Maps are inconsistent in formatting; manual validation was crucial.
4. The distribution of quality restaurants is relatively even across Sanur, Kuta, and Denpasar, but Sanur showed a slight edge in boutique, high-rated eateries.

5. Recommendations & Use Cases

This dataset can serve multiple stakeholders:

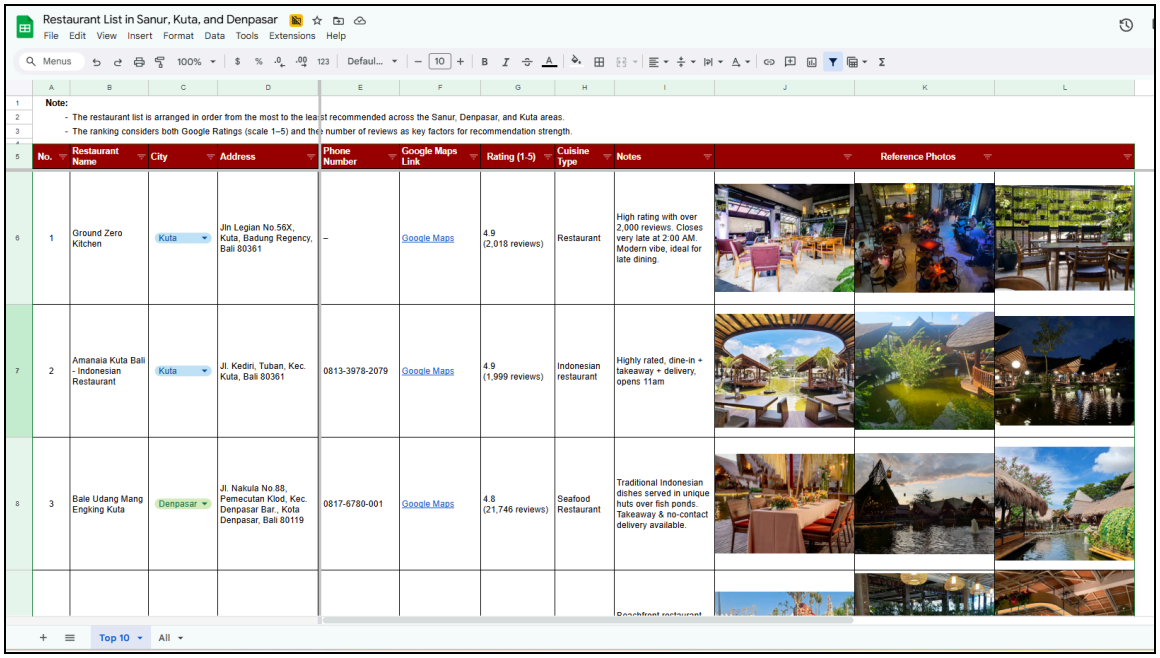
No.	Use Case	Description
1	**Tourism Boards & Travel Platforms**	Can use the Top 10 list for guest

No.	Use Case	Description
		recommendation guides or curated experiences.
2	**Real Estate & Hospitality Planners**	Use the full listing for neighborhood mapping or lifestyle asset evaluation.
3	**Marketing Teams**	Can develop location-targeted promotions or partnerships with highly ranked venues.
4	**Product Integrations**	The data structure supports direct integration into apps or directories with location filters.

8. Sample Screenshots / Visualizations

Google Spreadsheet Public Link:

- [Restaurant List in Sanur, Kuta, and Denpasar]



9. Conclusion & Reflection

This project successfully demonstrates how combining data accuracy, statistical methods, and manual verification can produce a more reliable and actionable recommendation system for local dining options. By leveraging the Bayesian average formula, the ranking reflects not just popularity but also credibility, avoiding biases caused by low-review-count venues.

The manual effort to classify and verify over 80 addresses paid off by ensuring that every entry is accurately assigned to its closest or most relevant area—Sanur, Kuta, or Denpasar. This not only enhances the value of the recommendations but also allows for seamless integration into broader use cases such as travel planning, lifestyle guides, and neighborhood profiling.

From this process, it's clear that while digital platforms like Google Maps provide vast public data, **human insight and context-aware decision-making remain essential** in making that data truly meaningful and usable.

This task also highlights the importance of:

- Applying the right ranking methodology based on project goals
- Maintaining rigorous standards in data classification, and
- Structuring output formats to serve both decision-making and downstream usage.

Moving forward, this work can serve as a template for similar location-based recommendation systems, and opens up opportunities to expand the dataset with deeper qualitative insights—such as cuisine types, price points, or even visual ambiance—making future outputs even more valuable for targeted audiences.

End of Document