# World's Top Restaurants

## Data Analysis Report

## 1. Dataset Overview

**Dataset Name:** World Top Restaurants
**Description:** This dataset features 50 of the world's most acclaimed restaurants, spanning 19 countries across 5 continents. It includes detailed information on Michelin ratings, cuisine types, pricing, chefs, years of operation, and signature dishes, representing the pinnacle of culinary excellence globally.

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## 2. Data Cleaning and Transformation

Power Query was used to clean and prepare the dataset for analysis:

- Checked and corrected data types for numeric, text, and date fields.
- Standardized cuisine categories using text trimming and normalization.
- Cleaned and imputed missing `Signature_Dish` values with "Not Specified."
- Fixed inconsistent country names and merged continent mapping.
- Converted `Michelin_Stars` to numeric and removed redundant `Star_Category`.
- Standardized chef names (trimmed, proper case).
- Created derived columns: `Years_Operating` and `Price_Category`.
- Removed duplicate restaurant entries.
- Loaded the cleaned table into Excel for visualization.

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## 3. Key Measures (Power Pivot)

- **Average Price per Star:** Evaluates the price-to-prestige ratio.
- **Top Chef by Average Rating:** Highlights highest-rated chefs globally.

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# 4. KPIs (Pivot Tables)

| KPI | Value |
|---|---|
| Total Restaurants | 50 |
| Total Michelin Stars | 96 |
| Average Rating | 4.702 |
| Average Price per Star | 146.39 USD |
| Top Chef by Average Rating | 4.9 |

These KPIs are placed at the top of the dashboard as single-value metrics, providing an at-a-glance overview.

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# 5. Business Insights & Visualizations

## 5.1 Michelin Star Distribution by Continent

- **Pivot Setup:** Rows = `Continent`, Values = `Sum of Michelin_Stars`
- **Visualization:** Column chart
- **Insight:** Europe dominates with 57 stars, followed by North America (22) and Asia (17). South America has no Michelin stars.

| Continent | Michelin Stars |
|---|---|
| Asia | 17 |
| Europe | 57 |
| North America | 22 |
| South America | 0 |
| **Total** | 96 |

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## 5.2 Average Rating per Cuisine Type

- **Pivot Setup:** Rows = `Cuisine_Type`, Values = `Average of Rating`
- **Visualization:** Stacked column chart
- **Insight:** French, Italian, and Italian Contemporary cuisines achieve top ratings (up to 4.9), while cuisines like Colombian Contemporary and Contemporary Russian are slightly lower.

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## 5.3 Average Price per Cuisine Type

- **Pivot Setup:** Rows = `Cuisine_Type`, Values = `Average of Average_Price_USD`
- **Visualization:** Stacked bar chart

- **Insight:** Avant-Garde, Molecular Gastronomy, and New Nordic are the most expensive, while British Contemporary and Colombian Contemporary are more affordable.

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## 5.4 Years Operating vs Michelin Stars

- **Pivot Setup:** Rows = `Years_Operating`, Values = `Sum of Michelin_Stars`
- **Visualization:** Scatter plot
- **Insight:** Established restaurants with 20–36 years of operation tend to earn the most stars, though some newer restaurants also achieve high acclaim.

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## 5.5 Top Restaurants per Continent by Rating

- **Pivot Setup:** Rows = `Continent`, Values = `Max of Rating`
- **Visualization:** Bar chart
- **Insight:** Each continent has top restaurants rated around 4.9, showing global excellence.

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# 6. Interactivity

Three slicers were added to enhance analysis:

- **Ratings**
- **Continent**
- **Price Category**

All pivot tables and charts are dynamic, allowing users to filter and explore data interactively.

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# 7. Summary

This analysis highlights the distribution of Michelin stars globally, compares cuisine quality and pricing, and identifies top chefs and restaurants. The clean dataset, dynamic KPIs, and interactive visualizations make this a strong portfolio-ready Excel project, demonstrating both technical skills in Power Query and PivotTables, as well as analytical storytelling.