

# Restaurant Orders Dashboard – Power BI Project

## Overview:

Designed and developed an **interactive Power BI dashboard** to analyze restaurant sales, customer demographics, and ordering patterns, enabling data-driven decision-making for business growth.

## 1. Data Collection & Import

- Gathered multiple datasets: restaurant details, menu items, orders, order types, and customer profiles.
- Imported Excel datasets into Power BI.

## 2. Data Cleaning & Transformation (Power Query)

- Removed duplicates, handled missing values, and standardized formats.
- Split/merged columns (e.g., extracted date & time, standardized category names).
- Created calculated columns such as **Total = Quantity × Price**.
- Applied correct data types and prepared data for modeling.

## 3. Data Modeling

- Built a **star schema** with fact tables (Orders) and dimension tables (Restaurants, Menu, Users, Order Types, Date).
- Created and marked a Date Table for time-based analysis.
- Applied one-to-many relationships, avoiding circular/many-to-many joins.

## 4. DAX Measures

- Developed KPIs:
  - **Total Sales**
  - **Order Count**
  - **Average Order Value**
  - **% Repeat Customers**
- Created demographic and cuisine segmentation measures.

## 5. Dashboard Design & Visualization

- Designed an interactive layout with KPI cards, bar charts, treemaps, line charts, maps, and demographic visuals.
- Key visuals:
  - **Top 10 Restaurants by Revenue**
  - **Revenue by Month**
  - **Top 5 Cuisines by Revenue**
  - **Orders & Restaurants by City**

- **Gender Split & Occupation-wise Revenue**
  - **Veg vs Non-Veg Sales Share**
- Added slicers for city, restaurant, cuisine, and order type.

## 6. Insights

- **Domino's Pizza** emerged as the top-performing brand.
- **Bikaner** had the highest orders and number of restaurants.
- **Students** were the largest revenue-generating group.
- Veg and Non-Veg demand were nearly equal.
- Identified seasonal trends and sales dips.

## 7. Final Output

- Delivered a **clean, interactive Power BI dashboard** ready for stakeholder presentation.
- Summarized insights into an actionable business narrative.