

SWIGGY SALES DASHBOARD ANALYSIS

EXCEL|DATA ANALYTICS PROJECT

1. Project Overview

This project involves building a comprehensive Sales Analysis Dashboard using Microsoft Excel to analyze food delivery order data. The objective was to transform raw transactional data into actionable business insights through structured data cleaning, analysis, and interactive visualizations. The dashboard was designed for business stakeholders to quickly understand overall performance, identify trends over time, compare regional performance, and evaluate category-wise contributions (Veg vs non-Veg). The entire workflow from raw data preparation to final dashboard was executed in Excel without using external tools or programming languages. Key outcomes of the project include real-time KPI monitoring, identification of peak sales periods, discovery of top-performing cities and states, and analysis of customer rating patterns. The project demonstrates strong Excel analytics skills, business problem understanding, and dashboard storytelling.

2. Business Problem Statement

The food delivery business experiences fluctuations in sales performance across cities, food categories, and time periods. Management needs a single, centralized view to monitor performance, understand demand patterns, and identify growth opportunities. Without a consolidated dashboard, tracking KPIs such as Total Sales, Total Orders, Average Order Value (AOV), and Average Ratings becomes time-consuming and error-prone. Decision-makers also face challenges in identifying high-performing regions and seasonal trends.

Business Question:

How can food ordering data be leveraged to identify trends, improve customer experience, and optimize pricing and restaurant performance across regions using Excel-based analytics?

3. Dataset Description

The dataset represents food delivery transactions captured at the order level. Each row corresponds to an individual order, and columns represent order attributes and performance metrics.

Key Columns:

- Order ID
- Order Date
- City
- State
- Restaurant Name
- Food Type (Veg / Non-Veg)
- Order Value
- Customer Rating
- Ratings Count

The dataset is suitable for time-series analysis, regional performance comparison, and KPI calculation. It was used solely for educational and portfolio purposes.

4. Data Cleaning & Preparation in Excel

Data cleaning was performed directly in Microsoft Excel to ensure accuracy and consistency:

- Removed duplicate order records to avoid inflating KPIs.
- Handled missing values in Order Value and Customer Rating using logical imputation rules.
- Standardized date formats to ensure correct time-based analysis.
- Ensured consistent naming for cities and states to avoid fragmented grouping in Pivot Tables.
- Converted the raw dataset into an Excel Table to enable dynamic range updates.

- Created calculated columns:
- Month, Week, Quarter (derived from Order Date)
- Sales Amount
- Order Count (binary flag per order)
- Rating Buckets (Low/Medium/High for segmentation)
- Validated numeric fields and corrected data type mismatches.

This step ensured the dataset was analysis-ready and reliable for downstream reporting.

5. KPIs Defined & Calculated

Key Performance Indicators (KPIs) were defined to align with business objectives:

- Total Sales: Sum of all order values.
- Total Orders: Count of completed orders.
- Average Order Value (AOV): Total Sales divided by Total Orders.
- Average Rating: Mean of customer ratings.
- Ratings Count: Total number of ratings received.

These KPIs were calculated using Excel formulas and Pivot Table aggregations. KPI cards were designed on the dashboard with conditional formatting to highlight performance at a glance.

6. Pivot Tables & Analytical Approach

Pivot Tables were used as the analytical backbone of the project:

- Sales by Month and Quarter to observe seasonal trends.
- Sales by City and State to identify regional performance.
- Sales by Food Type (Veg vs Non-Veg) to compare category contribution.
- Top 5 Cities by Sales using sorting and ranking in Pivot Tables.
- Orders and Sales distribution by Rating Buckets to evaluate quality-performance relationships.

Slicers were added to Pivot Tables for dynamic filtering by Time, City, State, and Food Type. This enabled interactive exploration without modifying the raw data.

7. Dashboard Design & Visualizations

The dashboard was designed to be user-friendly and executive-ready:

- KPI Cards for Total Sales, Orders, AOV, Average Rating, and Ratings Count.
- Line Charts for Daily, Weekly, and Monthly Sales Trends.
- Column Charts for Quarterly Performance Summary.
- Bar Charts for Top 5 Cities by Sales.
- Category Comparison Chart for Veg vs Non-Veg Sales.
- Map Visualization for Sales by State (Excel Map Chart).
- Consistent color theme and formatting for readability.
- Interactive slicers for instant filtering.

The layout was structured to guide users from high-level KPIs to detailed breakdowns.

8. Insights & Findings

Key insights derived from the Excel dashboard:

- ✓ Identified peak sales months and high-performing quarters.
- ✓ Discovered top revenue-generating cities and states.
- ✓ Observed differences in sales contribution between Veg and Non-Veg categories.
- ✓ Detected daily and weekly demand fluctuations.
- ✓ Analyzed relationships between customer ratings and sales performance.

- ✓ Highlighted regions with growth potential based on lower performance trends.

These insights support targeted marketing, operational planning, and regional strategy optimization.

9. Business Recommendations

Based on insights from the Excel dashboard:

- Focus marketing campaigns in top-performing cities during peak months.
- Launch targeted promotions during low-demand periods.
- Optimize pricing strategies based on AOV trends.
- Strengthen partnerships with high-performing restaurants in key regions.
- Improve service quality and delivery experience in lower-rated regions.
- Promote high-performing food categories to increase revenue contribution.

10. Outcome & Conclusion

The project delivered a fully interactive Excel Sales Analysis Dashboard that enables stakeholders to:

- Monitor KPIs in near real-time.
- Identify trends and seasonal patterns.
- Compare regional and category-wise performance.
- Support data-driven strategic decisions.

This project demonstrates end-to-end Excel analytics capability, from data cleaning and KPI definition to dashboard storytelling and business recommendations.

