



# Swiggy Project Report

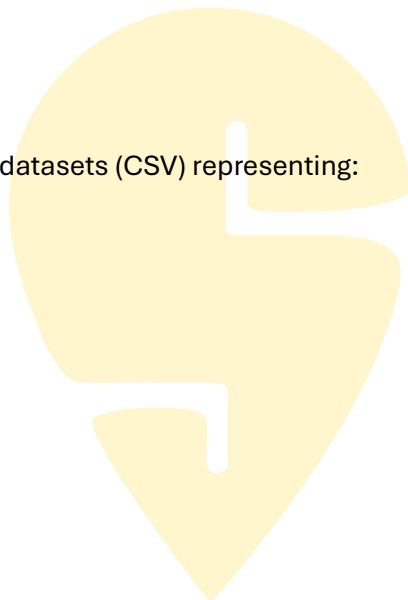
## 🎯 Objective of the Project

The purpose of this project is to build an interactive and insightful Power BI dashboard to analyse Swiggy's food delivery operations, customer behaviour, order trends, and restaurant performance. The aim is to help stakeholders make data-driven decisions based on actionable insights.

## 🛠️ Scope of Work / Tasks Performed

### 1. Data Collection

- Collected data from simulated datasets (CSV) representing:
  - Orders
  - Restaurants
  - Food
  - Menu
  - Users



### 2. Data Cleaning & Preparation

- Removed null, duplicate, and invalid entries.
- Converted data types appropriately (date, currency, etc.)
- Standardized location and cuisine names.
- Change data types.

### 3. Data Modeling

- Created a star schema with fact and dimension tables
- Established proper relationships using primary & foreign keys
- Optimized model performance using DAX measures and logical structuring.

#### 4. DAX Measures & Calculations

- Created custom DAX measures for:
  - Total Orders, Total Revenue, Average Delivery Time
  - Customer Retention Rate, Ratings, Revenue per City
  - Month-over-Month and Year-over-Year growth
- Used CALCULATE, FILTER, SUMX, COUNT and Time Intelligence Functions

#### 5. Visualizations and Dashboard Design

- Designed interactive reports with:
  - KPI Cards
  - Bar/Line/Map/Donut Charts
  - Drill-down and drill-through reports
  - Dynamic slicers for City, Time, Cuisine, and Order Type
- Used Page Navigation Buttons

#### Key Features of the Dashboard

- Executive summary with KPIs
- City-wise and cuisine-wise performance
- Delivery time and agent efficiency analysis
- Top restaurants and customer satisfaction tracking
- Real-time filters and responsive visuals

#### Tools & Technologies Used

- Power BI
- DAX (Data Analysis Expressions)
- Excel /CSV Files for Source Data

#### Outcome

A clean, professional dashboard that highlights operational performance and offers actionable insights into how Swiggy can optimize deliveries, improve customer satisfaction, and boost sales.



# Swiggy Dashboard

## DAX Function Used For Swiggy Project.

### 1. Order Count :

**Orders\_count = COUNTROWS(Orders)**

Using Order Count DAX Function helps to get Total Orders:

- Shows the total number of orders placed over a period .
- Useful as a KPI (Key Performance Indicator) tile in the dashboard.

Example Use Dashboard:

- KPI Card: "Total Orders ".
- Line Chart and Bar Chart.

### 2. User Count :

**Users\_count = DISTINCTCOUNT(Users[User\_id])**

The total number of unique users (customers) who have placed orders .

- To track how many individual customers are using the platform.
- Helps measure user growth, customer retention, and market penetration.

Example Use in Dashboard:

- KPI card: Total Users: 12,543
- Line chart: User Growth Over Months

### 3. Rank : It is used for finding top 10 % customer

**Rank = RANKX(ALL(Users),[Total Sales],,DESC)**

A rank for each user, based on how much money they have spent on orders.

- To identify top-spending customers.
- Ranking allows you to later filter out top 10% of users for loyalty programs, etc.

### 4. Total Sales : It is also used for finding 10% customer

**Total Sales = CALCULATE(SUM(Orders[Value]),Orders[Type]="Amount")**

The actual money spent by each user on the platform.

- Provides the value based on which users are ranked.
- Ensures only revenue-generating transactions are considered in ranking.

## 5. Top 10% customer :

**Top 10% customer = CALCULATE(SUM(Users[Total Sales]),FILTER(Users,Users[Rank]<=7793))**

The total sales generated by the top 10% of customers.

- Identifies top-performing customers who generate a large portion of revenue.

Note on the number 7793:

- It seems like 7793 represents the top 10% of total customers.
- For example, if you have 77,930 customers, then 10% = 7,793.

## 6. Rating Count :

**Rating\_count = COUNT(Restaurant[Rating])**

The total number of ratings received for restaurants.

- To measure user engagement with restaurants.
- Indicates how many customers left feedback.

Example Use:

- Bar chart: Ratings per Restaurant
- KPI: Total Ratings.

## 7. Total Qunatity Amount :

**Total Qunatity Amount = SUM(Orders[Value])**

The total sales/revenue generated from all customer orders.

- To understand how much business is being done on the platform.
- Helps track total income, order volume, or sales trends.

Example Use:

- KPI: Total Order Value.
- Line chart: Revenue Over Time

## 8. Sales Values : It is created for top N sales

**Sales\_Values = SUM(Orders[Value])**

The total sales amount across all orders.

- It serves as the base metric for ranking cities or other dimensions by sales.
- Essential for Top N analysis, revenue trends, or KPIs.

Example Use:

- Total Sales across all cities

## 9. Top Number Of Sales :

```
TopN sales = VAR rankValue = RANKX(ALL(Orders[City]),[Sales_Values],,DESC)  VAR  
selectedRank= SELECTEDVALUE(Rank_Table[No]) RETURN IF(selectedRank =  
0,[Sales_Values],IF(rankValue<= selectedRank,[Sales_Values],BLANK()))
```

A dynamic measure that shows sales only for Top N cities (or whatever category you use).

- Creates a dynamic Top N analysis .
- It is used to calculate the top number of sales.

## 10. Order User count :

**Order user count = DISTINCTCOUNT(Orders[User\_id])**

Total number of customers who placed at least one order.

- Helps understand user participation or active customer base.
- Used to measure customer growth.

Example Use:

- KPI card: Order Users.
- Area chart and Bar Chart

## 11. Current Year : It is created by c Current year Sale.

**Current Year = MAX(Orders[Year])**

A scalar value representing the most recent year with sales data (e.g., 2024).

- It dynamically detects the current reporting year based on available data.
- Important for automating comparisons .

It is used to calculate the unique year.

## 12. Current Year Sales :

**Current yr sale = var yr =[Current Year] RETURN CALCULATE([Sales\_Values],Orders[Year]=yr)**

Total sales for the most recent year.

- Automatically updates to show current year sales.

This calculates total sales only for the current year dynamically.

## 13. Previews Year : It is created by Previews Year

**Previews yr = [Current Year] - 1**

- It dynamically calculates the year before the latest year, which is important for comparison.
- Takes the current year and subtracts 1 to get the previous year.

#### 14. Previous Year Sale :

**Previous Yr Sale = VAR yr = [Previous yr] RETURN CALCULATE([Sales\_Values],Orders[Year]=yr)**

Total sales from the previous year.

- Enables Year-over-Year (YoY) performance comparisons.
- Useful for growth analysis, performance tracking, and insights

#### 15. Total City :

**Total city = DISTINCTCOUNT(Orders[City])**

The number of cities where orders have been placed.

- To monitor geographic reach of the platform.
- Helps Swiggy know where they are active and where to expand.

Example Use:

- KPI: Cities Served: 48
- Map Visual: Orders by City

#### 16. Restaurant Count :

**Restaurant count = DISTINCTCOUNT(Restaurant[Restaurant\_id])**

The total number of restaurant partners Swiggy is working with.

- To measure platform supply — more restaurants mean more options for customers.
- Useful to track restaurant onboarding or compare vendors by city.

Example Use:

- KPI: Restaurants Available: 3,200
- Bar chart: Restaurants per City

#### 17. Average Rating :

**AVG Rating = AVERAGE(Restaurant[Rating])**

The average quality score (based on user ratings).

- To monitor customer satisfaction and service quality.
- Helps identify high-performing or underperforming restaurants.

Example Use:

- KPI: Average Rating: 4.3/5
- Line Chart: Average Rating Over Time

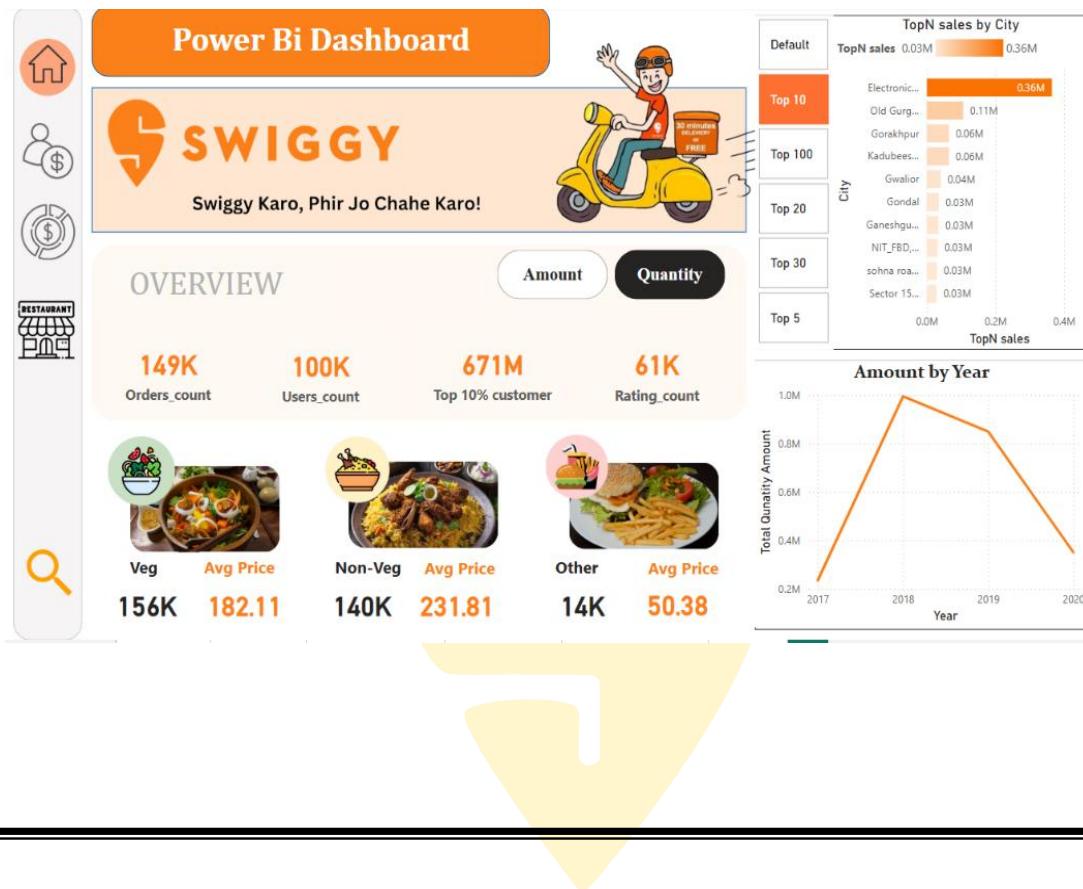


## Swiggy Dashboard Information



# SWIGGY

This is the first page of the “Swiggy Dashboard”. In this Dashboard used the DashBoard button to move on to the original dashboard page.



High Order Volume: 149K orders and 100K users, with top 10% customers contributing 671M, indicating heavy reliance on loyal users.

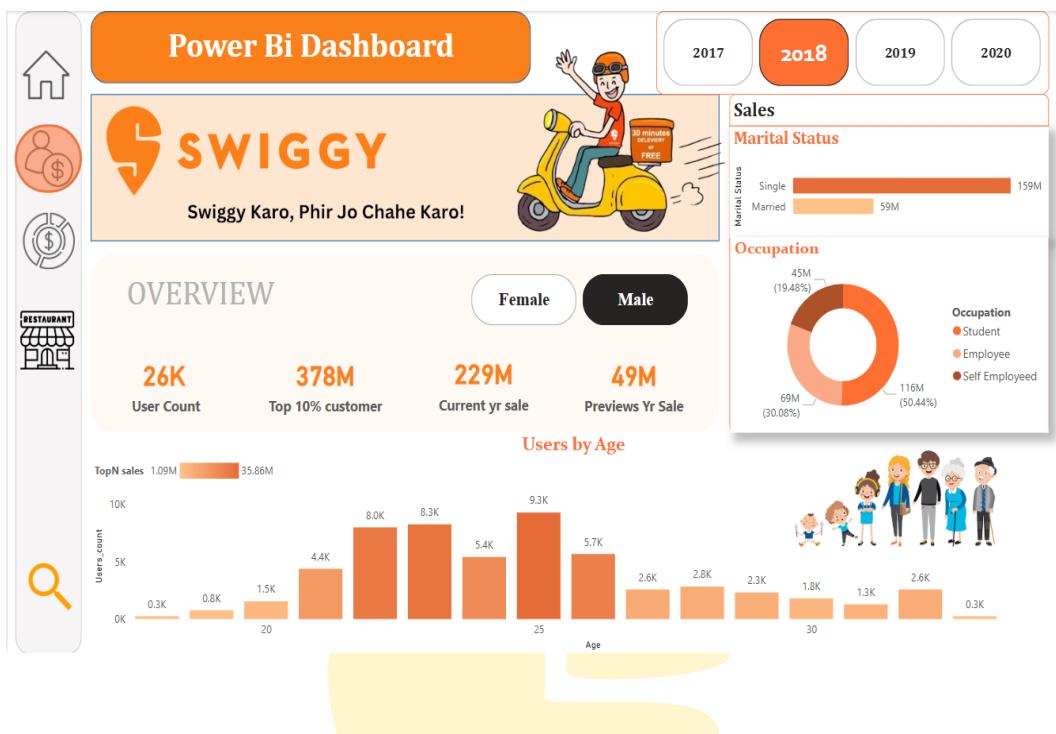
#### Food Category Trends:

- Veg is most ordered (122M), avg price ₹182.11.
- Non-Veg has higher price (₹231.81) but slightly lower orders.
- Other items are low-cost and less popular.

Top Cities: Tirupati, Electronic City, and Baner Pune lead in sales — focus areas for growth.

Yearly Trend: Peak in 2018, then declining — suggests a need to investigate and revamp strategies.

Opportunities: Customer retention, city-specific marketing, and boosting underperforming categories.



User Count: 26K users contributed to 229M in current year sales.

Top 10% customers contributed a massive 378M, showing a high dependency on loyal users.

- Sales by Marital Status:

Single users contributed significantly more (159M) than married users (59M).

- Sales by Occupation:

Employees made up over half the sales (116M, 50.44%).

Followed by Self-employed (69M) and Students (45M).

- Age-wise User Distribution:

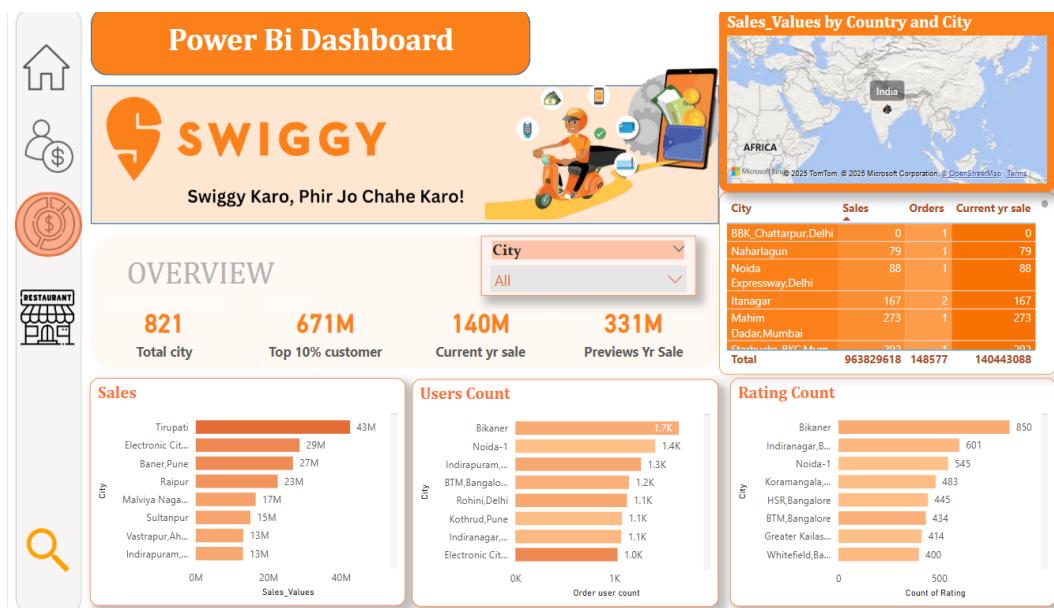
Highest user counts in the 20–26 age group, peaking around age 25.

Very low engagement from users over 30.

Focus on retaining and rewarding top 10% users.

Target marketing to single, working professionals aged 20–26.

Explore growth among married users and older age groups.



Total Cities Covered: 821

Top 10% Customers: Contributed 671M, showing strong customer loyalty impact.

- Sales Performance:

Tirupati (₹43M) and Electronic City, Bangalore (₹29M) lead in sales.

High-performing cities include Baner, Raipur, and Malviya Nagar.

- User Count:

Bikaner (1.7K), Noida (1.4K), and Indiranagar (1.3K) have the highest user base.

- Rating Count:

Bikaner also leads in ratings (850), indicating active and engaged users.

Total Sales: ₹963M+ across all cities

Total Orders: 148K+

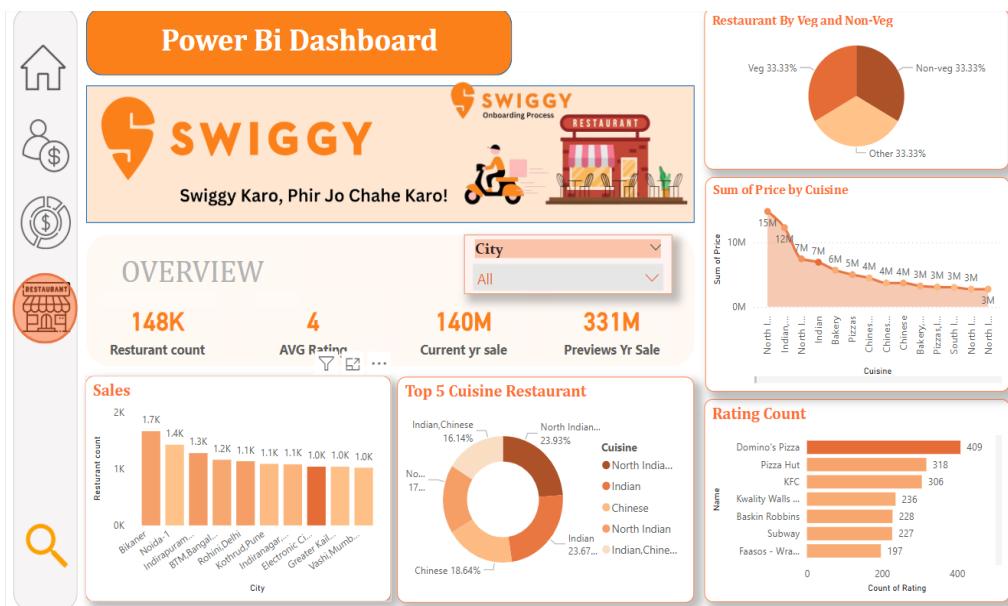
Current Year Sales: ₹140M

Tirupati is a top city by revenue despite fewer users — suggests high order value or frequency.

Bikaner has the highest engagement (orders + ratings).

Focus on replicating the success of top-performing cities in lower-tier ones.

Improve service in high-user cities with lower current sales.



Total Restaurants: 148K

Average Rating: 4 stars — overall good customer satisfaction.

- Sales Distribution:

Bikaner (1.7K), Noida (1.4K), and Indiranagar (1.3K) have the highest number of restaurants.

- Cuisine Preference:

North Indian (23.93%), Chinese (18.64%), and Indian (23.67%) are most popular.

Price-wise, North Indian cuisine leads (~₹15M), followed by Indian and Chinese.

Veg vs Non-Veg: Balanced — each makes up 33.33% of restaurant categories along with "Other".

- Top Rated Restaurants:

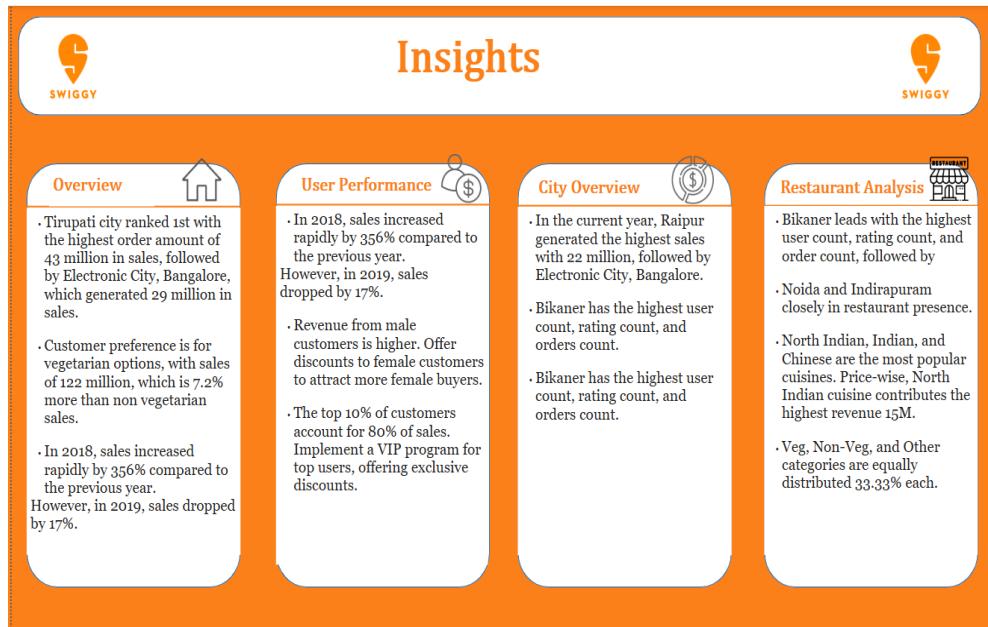
Domino's Pizza leads with 409 ratings, followed by Pizza Hut and KFC.

Focus on boosting ratings and visibility of top cuisine categories (North Indian, Chinese).

High restaurant density in Bikaner and Noida — potential hubs for promotions.

Balanced Veg/Non-Veg mix — menu diversity is essential.

Partner more with top-performing brands (Domino's, Pizza Hut) for sustained engagement.



This is the last page of Swiggy Dashboard. In this page mentioned each page importance Insights.

# SWIGGY