

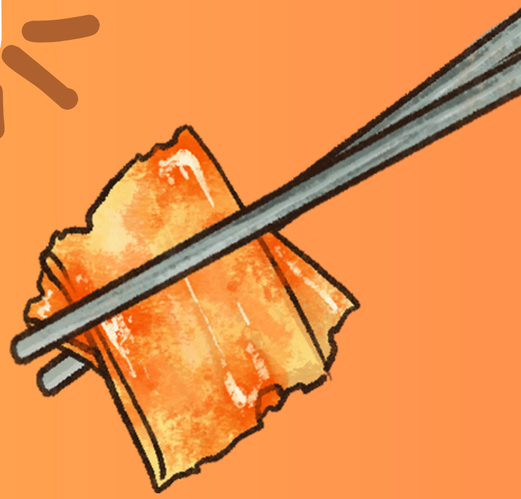
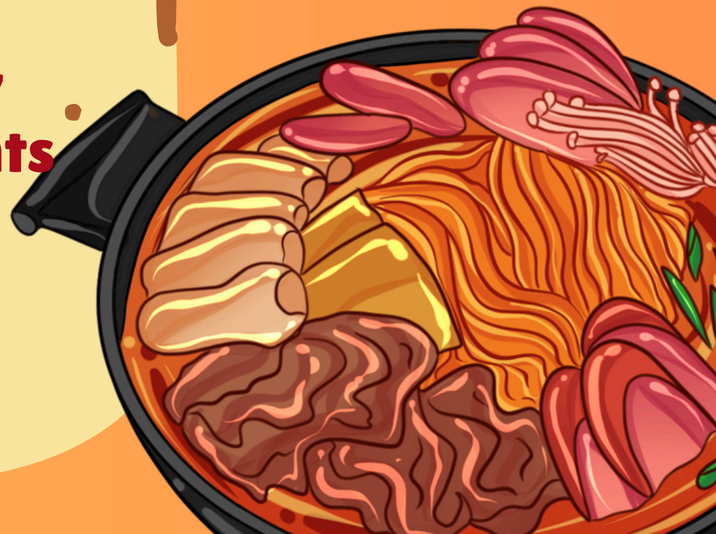
Fast Delivery Agent Analysis


Introduction





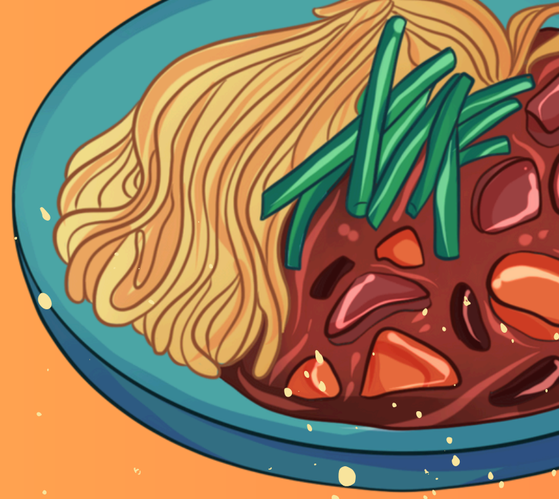
- The food delivery industry has grown rapidly, with platforms like Swiggy, Zepto, Blinkit and JioMart playing a key role.
- Delivery agents are the backbone of these services, ensuring quick and accurate deliveries.
- This project aims to analyze customer reviews, delivery performance, and key business insights using SQL

Objective

- ✓ Analyze customer feedback and agent performance
- ✓ Identify trends in delivery time, accuracy, and customer ratings
- ✓ Compare different delivery partners (Swiggy, Zepto, Blinkit, JioMart)
- ✓ Use SQL to extract insights for business improvement

Dataset Overview



- Source: Swiggy dataset from Kaggle
- Total Records: 5000 customer reviews

Key Columns:

- Agent Name, Rating, Delivery Time, Location
- Order Type, Customer Service Rating, Order Accuracy

Data Categories:

- ✅ Customers
- ✅ Orders & Delivery
- ✅ Partner Performance

Data Cleaning Process

- ✓ Removed duplicates to ensure accuracy
- ✓ Standardized categorical values (Yes/No, Correct/Incorrect)
- ✓ Converted text-based columns into numeric values
- ✓ Ensured no missing values in key fields

SQL Queries & Insights

- **CUSTOMER ANALYSIS**

1.Customers service rating by product

```sql
SELECT order_type, AVG(customer_service_rating) AS Avg_Service_Rating
FROM delivery_reviews
GROUP BY order_type
ORDER BY Avg_Service_Rating DESC;
```

order_type	Avg_Service_Rating
Grocery	2.9970
Pharmacy	2.9859
Electronics	2.9802
Essentials	2.9610
Food	2.9362

2 .find total orders and their running total

```sql
SELECT agent_name, COUNT(*) AS total_orders, SUM(COUNT(*))
OVER(ORDER BY agent_name) AS running_total_orders
FROM delivery_reviews
GROUP BY agent_name;
```

agent_name	total_orders	running_total_orders
Blinkit	1272	1272
JioMart	1224	2496
Swiggy Instamart	1222	3718
Zepto	1282	5000

• Delivery Partner Performance

1. Average delivery time by product type

```sql
SELECT order_type, AVG(delivery_time_min) AS avg_delivery_time
FROM delivery_reviews
GROUP BY order_type
ORDER BY avg_delivery_time;
```

order_type	avg_delivery_time
Pharmacy	34.2800
Food	34.6849
Electronics	35.2708
Grocery	35.2834
Essentials	35.2877

2. Top 5 locations with fastest delivery time

```sql
SELECT location, avg_delivery_time
FROM (
    SELECT location, AVG(delivery_time_min) AS avg_delivery_time
    FROM delivery_reviews
    GROUP BY location
) AS avg_times
ORDER BY avg_delivery_time ASC
LIMIT 5;
```

location	avg_delivery_time
Chennai	34.2510
Pune	34.3359
Delhi	34.5467
Kolkata	34.6035
Bangalore	34.7446

- **Top 5 fastest delivery agents**

```sql
SELECT agent_name, AVG(delivery_time_min) AS Avg_Delivery_Time
FROM delivery_reviews
GROUP BY agent_name
ORDER BY Avg_Delivery_Time ASC
LIMIT 5;
```

agent_name	Avg_Delivery_Time
Blinkit	34.6494
JioMart	35.0270
Zepto	35.0616
Swiggy Instamart	35.1195

Orders insights

- **Total orders per agent and their running total**

```sql
SELECT agent_name, COUNT(*) AS total_orders, SUM(COUNT(*))
OVER(ORDER BY agent_name) AS running_total_orders
FROM delivery_reviews
GROUP BY agent_name;
```

agent_name	total_orders	running_total_orders
Blinkit	1272	1272
JioMart	1224	2496
Swiggy Instamart	1222	3718
Zepto	1282	5000

- **Customer feedback type**

customer_feedback_type	feedback_count
Negative	1727
Positive	1648
Neutral	1625

```sql
SELECT customer_feedback_type, COUNT(*) AS feedback_count
FROM delivery_reviews
GROUP BY customer_feedback_type
ORDER BY feedback_count DESC;
```

- **Product Availability Impact on Ratings**

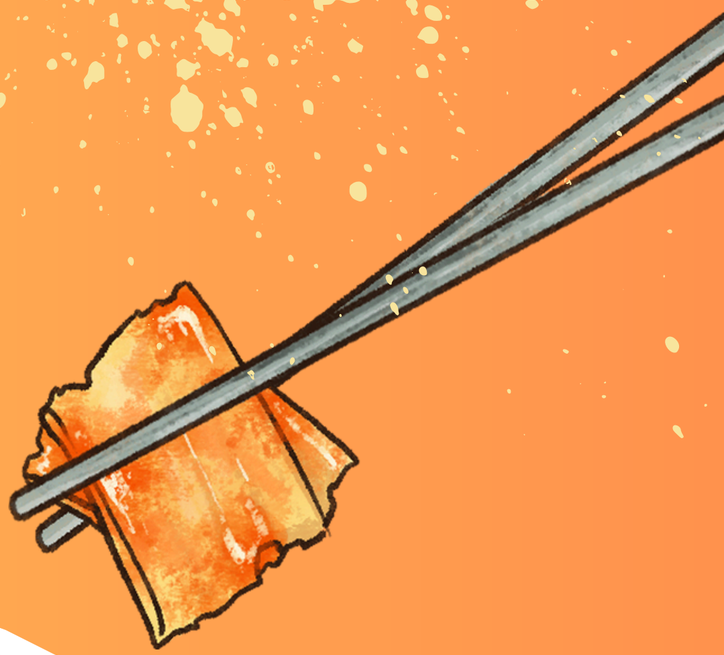
```sql
SELECT product_avail, ROUND(AVG(rating), 2) AS avg_rating, COUNT(*) AS total_orders
FROM delivery_reviews
GROUP BY product_avail
ORDER BY avg_rating DESC;
```

product_avail	avg_rating	total_orders
Out of Stock	3.01	2503
In Stock	3	2497

- **Locations where customers orders essentials more than the average**

```sql
SELECT location, COUNT(*) AS num_essential_orders
FROM delivery_reviews
WHERE order_type = 'Essentials'
GROUP BY location
HAVING COUNT(*) > (
    SELECT AVG(num_orders)
    FROM (
        SELECT COUNT(*) AS num_orders
        FROM delivery_reviews
        WHERE order_type = 'Essentials'
        GROUP BY location
    ) AS subquery
);
```

location	num_essential_orders
Delhi	111
Ahmedabad	104
Jaipur	109
Kolkata	113
Bangalore	101
Mumbai	105



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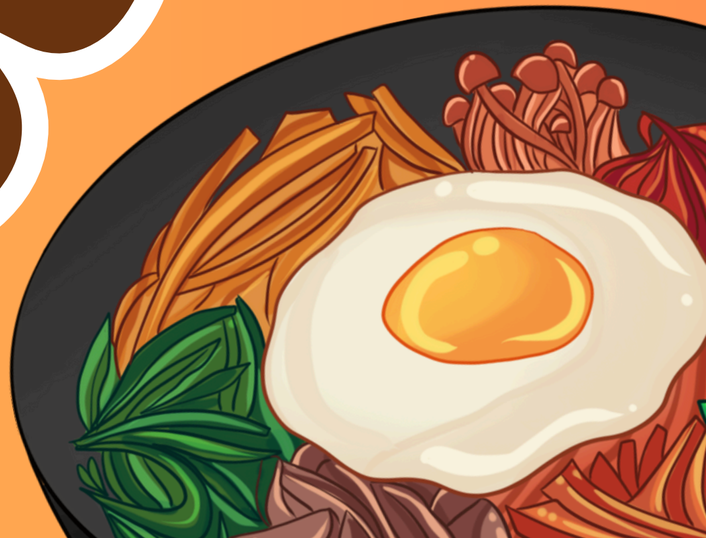

SHIVANI GORADE