



Food Panda

Final Analysis Report

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1. Project Overview

Name: Food panda Customer & Restaurant Performance Analysis

Objective: Analyse customer behaviour, restaurant performance, and order trends to generate actionable insights

Dataset: Food panda transactional dataset (6000 customer records, 18000+ order entries)

2. Dataset Summary

Rows: ~6000 customers, ~18000 orders

Columns: Demographics, restaurant details, dish, payment, delivery status, rating, date

Key Characteristics: Mixed categorical & numeric, multi-table model

Cleaning Steps: Duplicates removed, date formatted, null values handled, standardized text

3. Column-wise Assessment Summary

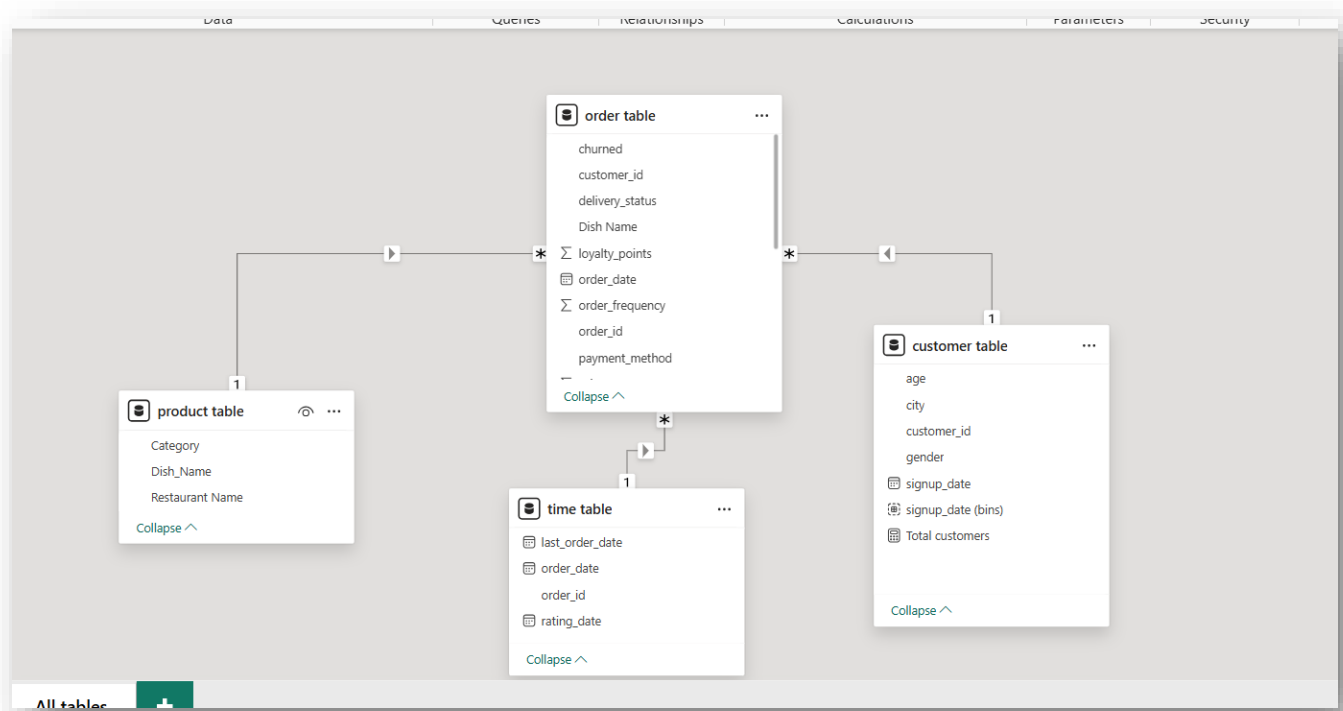
- Gender – 3 unique values (Male, Female, Other), no nulls
- Age Group – Adult, Senior, Teenager – for segmentation
- Restaurant Name – 5 unique brands

- Payment Method – Cash/Card/Wallet
- Delivery Status – Delivered / Delayed / Cancelled
- Dish name – 5 unique dishes
- Churned – active and non active customers
- Rating
- City – 5 unique cities

1	Column Name	Data Type (Text / Number / Date /)	Non-null Count	Missing Count (%)	Unique Values	Most Frequent Value (Mode)	Notes / Cleaning Required
2	customer_id	Text	6000	0	6000	n/a	Check duplicates (Primary Key)
3	gender	Text (Categorical)	6000	0	0	female	Standardize values (Male/Female/Other)
4	age	Text / Category (Teen/Adult/Senior)	6000	0	0	teengers	Convert to proper categories if needed
5	city	Text	6000	0	0	multan	Ensure consistent spelling
6	signup_date	Date	6000	0	276	14-10-2023	Convert to correct Date format
7	order_id	Text	6000	0	6000	n/a	Check duplicates (Primary Key)
8	order_date	Date	6000	0	1	03-08-2024	Convert to Date type
9	restaurant_name	Text	6000	0	0	subway	Check spelling consistency
10	dish_name	Text	6000	0	0	pasta	Optional grouping later
11	category	Text (Italian/Fast Food/etc.)	6000	0	0	italian	Standardize category labels
12	quantity	Number	6000	0	0	2	Ensure no negative / 0 values
13	price	Number (Decimal)	6000	0	996	1500	Outlier check needed
14	payment_method	Text (Wallet / Cash / Card)	6000	0	0	cash	Standardize spelling
15	order_frequency	Number	6000	0	0	49	Validate numeric consistency
16	last_order_date	Date	6000	0	62	n/a	Convert to Date type
17	loyalty_points	Number	6000	0	140	81	Outliers or negative check
18	churned	Yes/No / Boolean	6000	0	0	active	Ensure only Active/Inactive
19	rating	Number (1-5)	6000	0	0	3	Outlier check (should be 1-5)
20	rating_date	Date	6000	0	68	n/a	Format to Date
21	delivery_status	Text (Delivered / Delayed / Cancelled)	6000	0	0	completed	Standardize categories
22							
23							

4.Data Model Overview

- Orders [Customer ID] → Customers [Customer ID] (One-to-Many)
- Orders [Restaurant ID] → Restaurants [Restaurant ID] (One-to-Many)
- Orders [Product ID] → Products [Product ID] (One-to-Many)
- Orders [order ID] → time [order ID] (One-to-Many)



5. Analysis & Insights

- Active customers ~50% of total – engagement stable
 - Pasta most preferred dish, Subway highest-rated restaurant
 - Multan contributes highest revenue, highest customers
 - Wallet is most-used payment mode
 - Delivery delays visible for specific brand
- 2024 august 3 have highest order
- August his top signup month
- Mc Donald's have highest cancellation
- Booking by gender – female

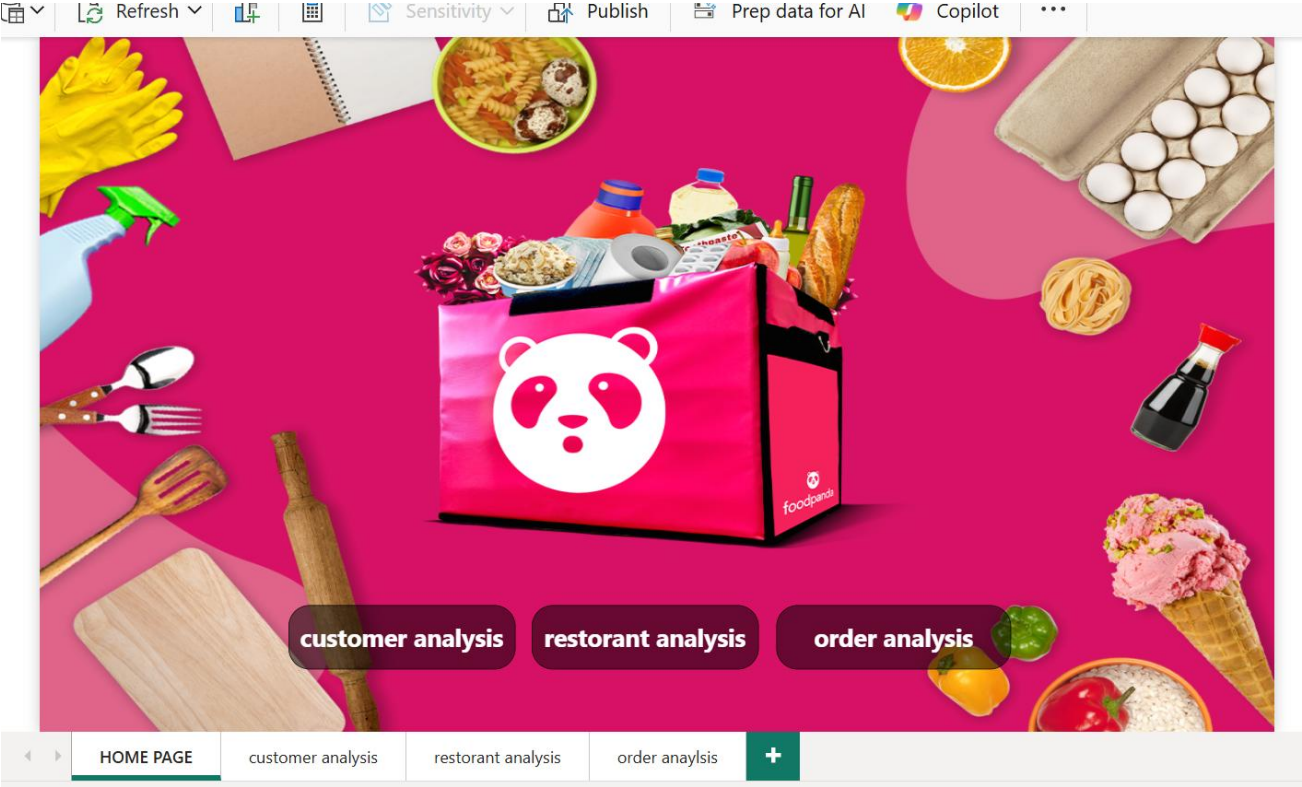
6. Conclusions

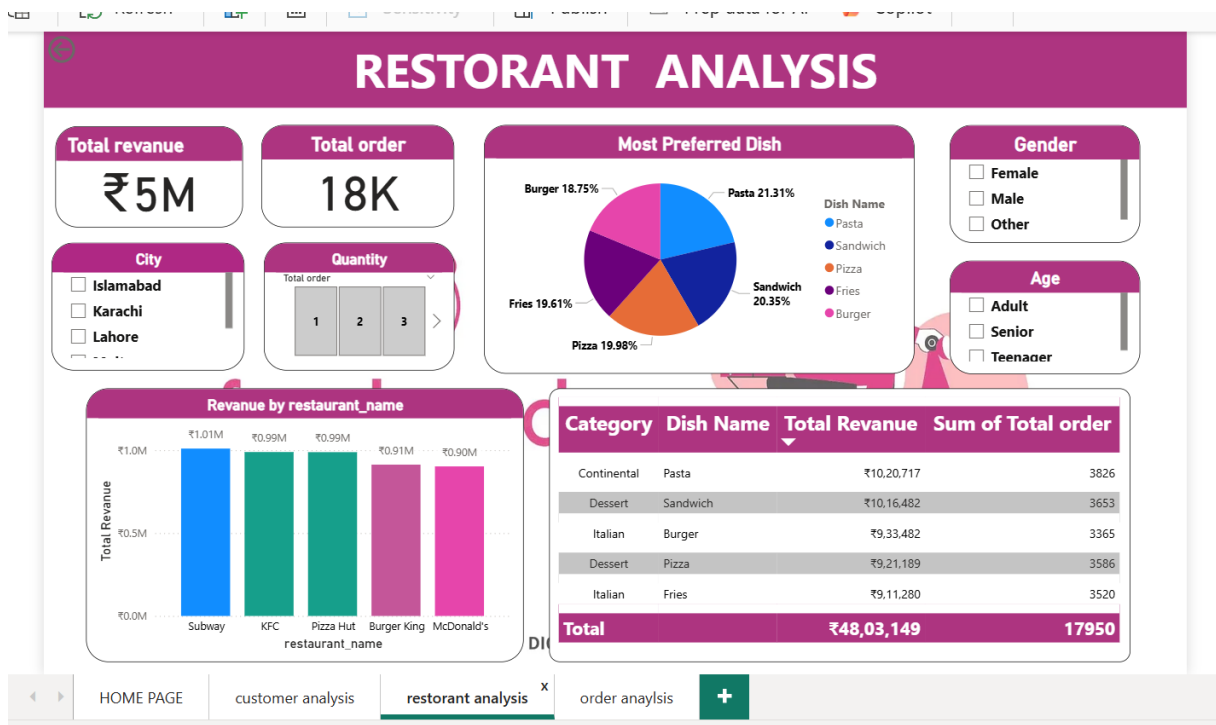
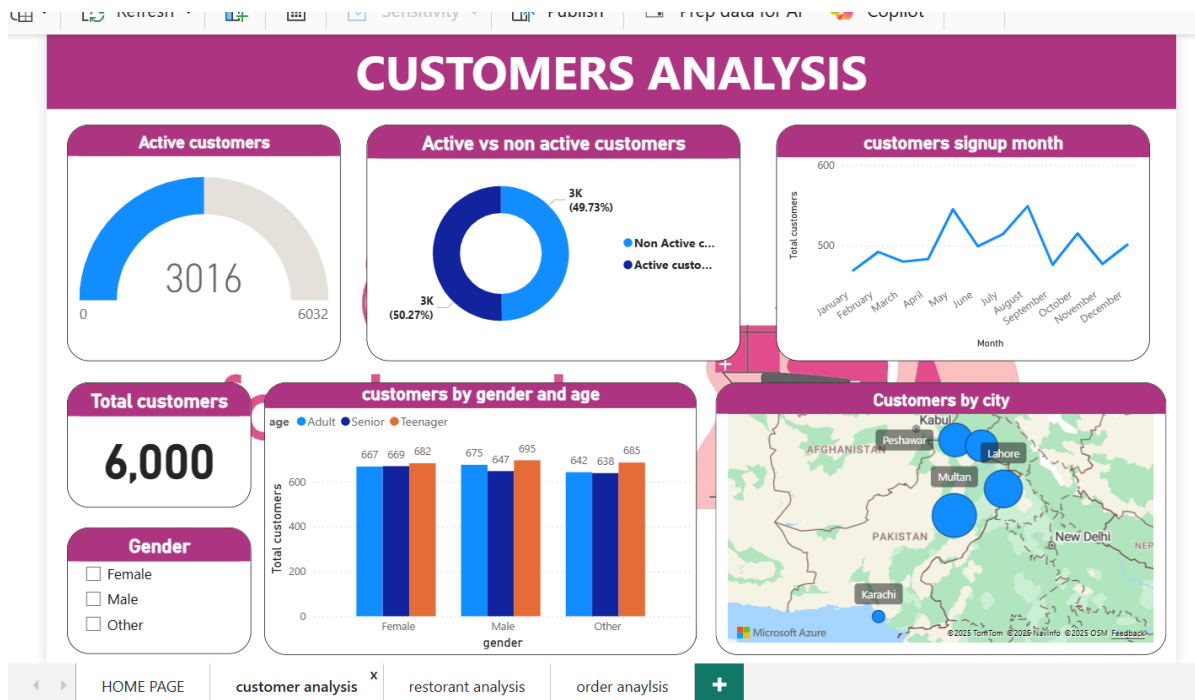
The Food panda performance analysis reveals that the platform has strong customer demand and consistent order activity across major cities. High-performing restaurants like Subway, KFC, and Pizza Hut significantly contribute to overall revenue, with pasta and sandwich items being most preferred by users. However, the analysis also highlights key areas of concern — rising customer inactivity, higher cancellation/delay ratios in specific cities, and limited repeat engagement from certain customer segments.

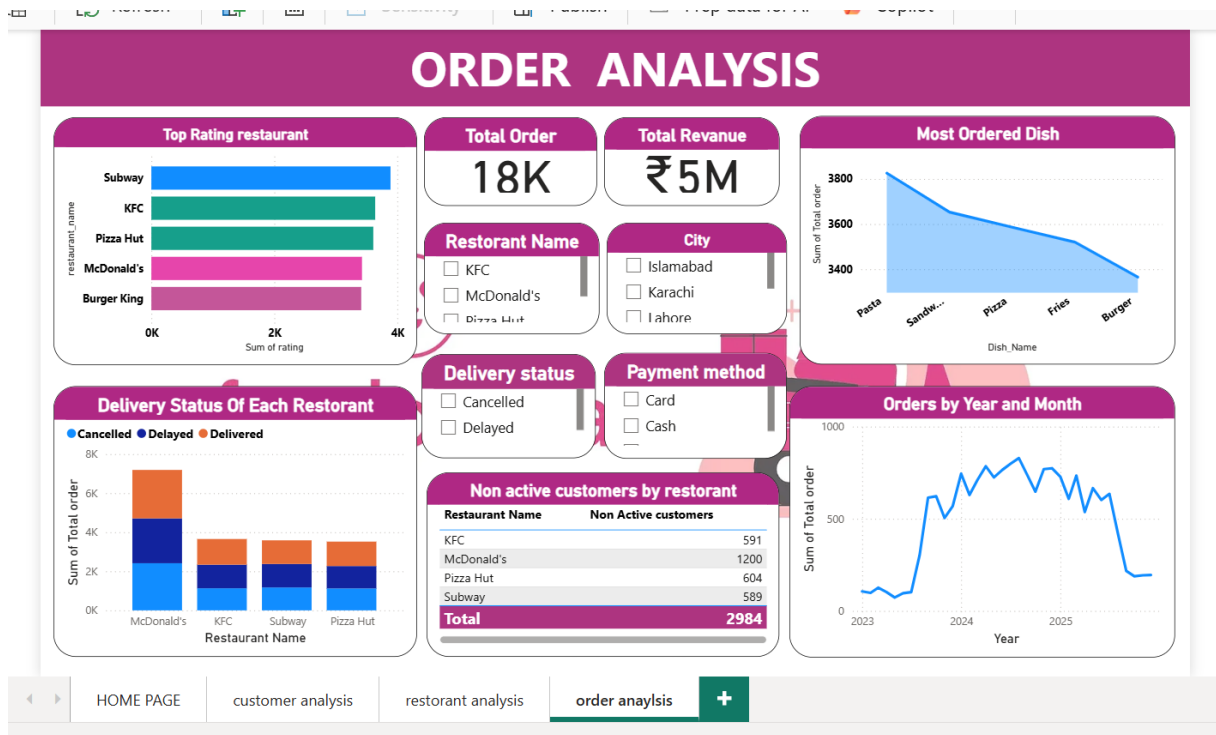
7. Recommendations

- Loyalty program for repeat customers
- Improve delivery efficiency for delayed regions
- Promote top-rated restaurants & trending dish seasons
- reactivating inactive users, Invest in reactivation campaigns (emails / offers) targeted at inactive segments and tailor premium offers for the high-value cohort.
- Pasta and sandwich appear among top-selling items — useful for promotions and cross-sell bundles.
- Multan show higher revenue — consider local marketing and partner investments there.
- Delays and cancellations damage customer trust and reduce repeat business.
- Promote Prepaid Payments (Medium Impact, Low Effort) Offer small incentives or discounts for Wallet/Card use to reduce COD cancellations.
- Create tiered benefits (free delivery, early access to promos) for top repeat customers to increase order.

8. Dashboard Overview







9. Notes / Limitations

- Limited historical years
- External factors (festivals, promotions) not included
- Only Food panda dataset – no competitor benchmarking

