

CASE SOLUTION SUBMISSION

CASE :

There is a food ordering platform whose current cancellation policy includes provisions for various categories of food items, including packaged items, buffet items, and non-MRP items.

Users have the option to cancel the **packaged items** or **buffet items** while the rest of the items(non-MRP) can be cancelled until the restaurant has not accepted the order.

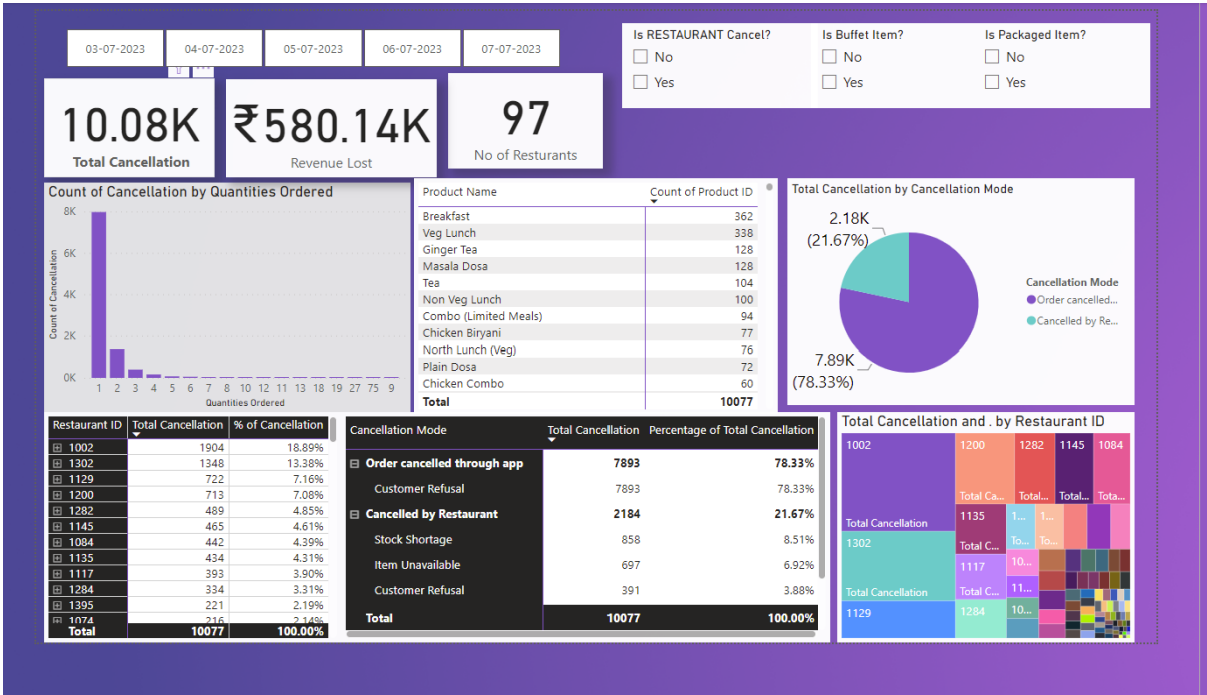
While the restaurant can choose to cancel the order until the order reaches the prepared stage.

When restaurants cancel the order, they are asked to provide a reason for the cancellation to analyse the reasons why restaurants cancel the order.

We are given Two Tables:

1. Cancelled Orders
2. Product Details

Dashboard :

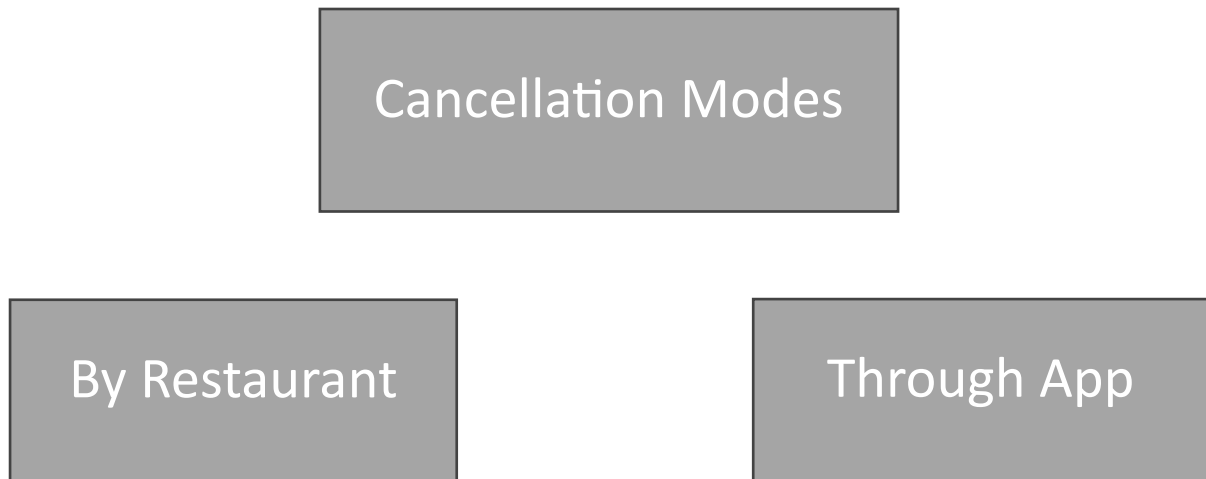


We will try to draw insights and recommendation using the steps mentioned:

Step 1 : Data Preparation, Exploration and Calculation of Key Metrics

- We first combine the Cancelled Orders and Product Details tables using common key “Order ID” to create comprehensive dataset for analysis.
- We then try to find KPIs(Key Performance Indicators) here we have “Total Cancellation”, “Total Revenue Lost”, “Total Restaurants”.
- We will then begin our EDA(Exploratory Data Analysis) by grouping the data into relevant categories like “Cancellation Mode” , “Reason of Rejection ”, “Product Type”, “Restaurant ID”, “Product Quantity” to identify patterns.
- We may start our analysis by analysing these one by one

(1) Cancellation Modes



Q) When a Restaurant can cancel?

>> Until Order reaches the prepared Stage.

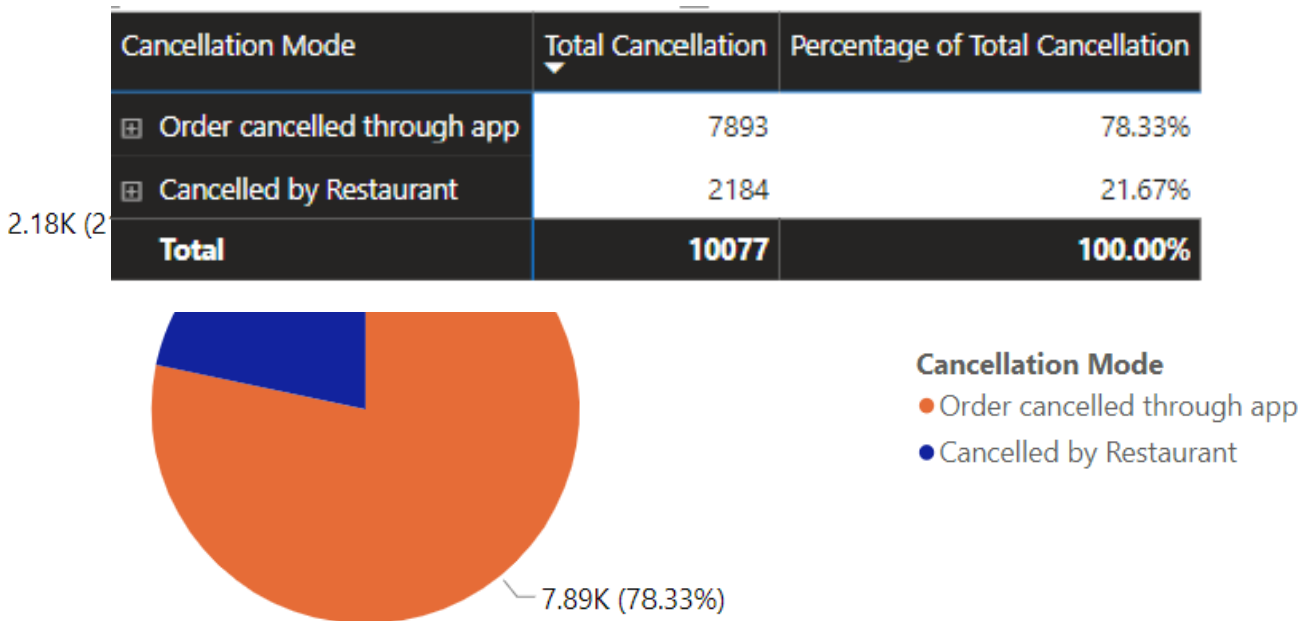
Q) Order Cancelled through App

>> Order Cancelled by Customer.

Total Cancellation – 10,077

- Findings:

- Nearly 78% of the total cancellation were made through app.



- While, 22% were the cancellation by restaurant.

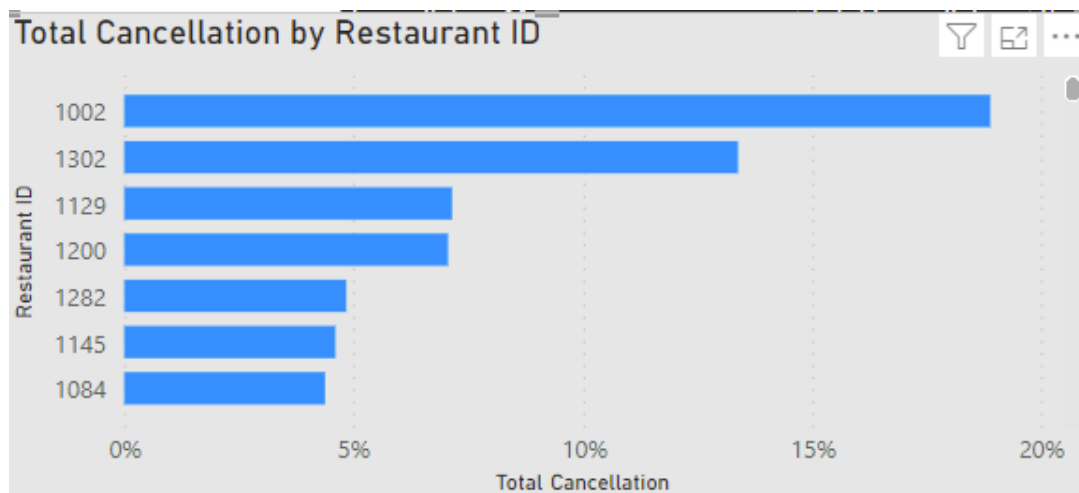
Now, for the products cancelled by restaurants,
We see that

- Nearly 90% of cancellation by restaurants happen due to three reasons major:
- Stock Shortage, Item Unavailable, Customer Refusal

Cancellation Mode	Total Cancellation	Percentage of Total Cancellation
Order cancelled through app	7893	78.33%
Cancelled by Restaurant	2184	21.67%
Stock Shortage	858	8.51%
Item Unavailable	697	6.92%
Customer Refusal	391	3.88%
Closed Premises	133	1.32%
High Demand at the Restaurant	105	1.04%
Total	10077	100.00%

Findings:

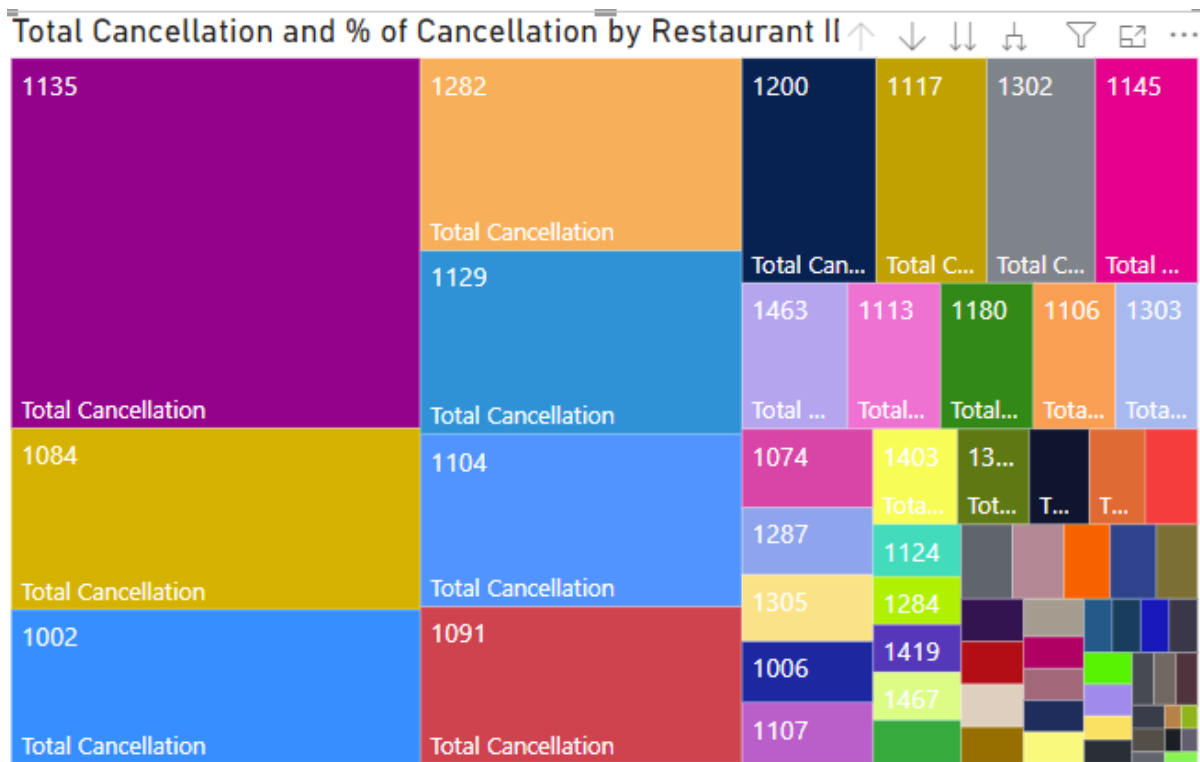
- The cancellation from restaurants having reasons as “Stock Shortage”, “Item Unavailable”, should be our topic of concern to minimize the cancellation from restaurant end.
- Nearly 50% of the total cancellation were faced at 7 restaurants.



Total Cancellation by restaurants were 2148

- 50% of cancellation were done by 5 restaurants out of 97.

Restaurant ID	Total Cancellation	% of Cancellation
1135	394	18.04%
1084	194	8.88%
1002	165	7.55%
1282	162	7.42%
1129	153	7.01%
Total	2184	100.00%



Finding:

- 5 restaurants out of total 97, with ID 1135,1084,1002,1282,1129 made 50% of

the cancellation by restaurants. So, we have to focus on these restaurants.

- Again, the top reason for cancellation was “Stock Shortage” and “Item Unavailable”

Restaurant ID	Total Cancellation	% of Cancellation
1135	394	18.04%
Cancelled by Restaurant	394	18.04%
Item Unavailable	151	6.91%
Stock Shortage	128	5.86%
Customer Refusal	61	2.79%
Closed Premises	27	1.24%
High Demand at the Restaurant	27	1.24%
1084	194	8.88%
Cancelled by Restaurant	194	8.88%
Stock Shortage	113	5.17%
Item Unavailable	57	2.61%
Closed Premises	15	0.69%
Customer Refusal	6	0.27%
High Demand at the Restaurant	3	0.14%
Total	2184	100.00%

(2) Product Type

Segmentation is as follows:

PRODUCT	Is Buffet?	Is Packed?
Buffet	Yes	No
Packed	Yes	Yes
Non-MRP	No	No

According to this, we will apply our slicer and analyse the cancellation in domain of Product Type.

Note: Non-MRP item can only be cancelled until the restaurant have not accepted the order.

6501
Buffet Cancellation

3177
Non-MRP Cancellation

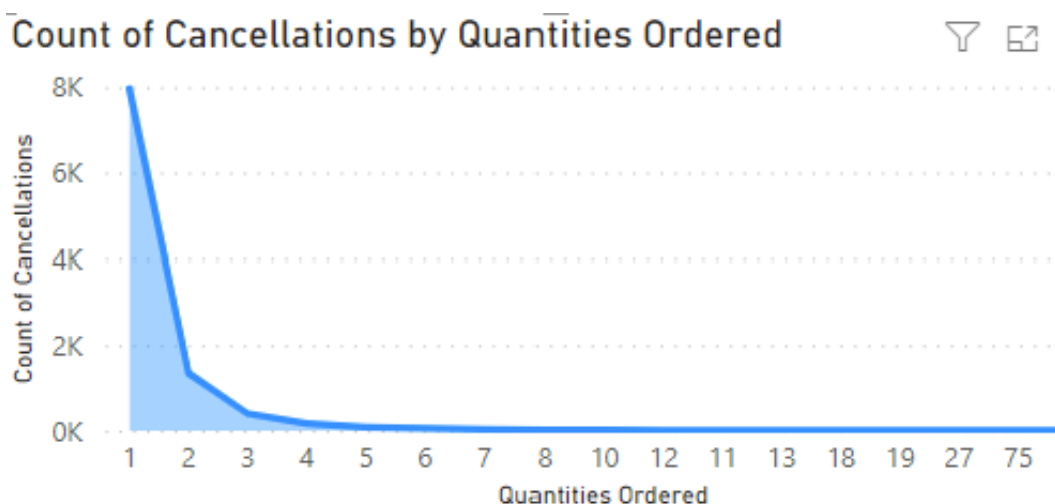
399
Packaged Cancellation

Findings:

- We should reform cancellation policy as the maximum number cancellation happen for Buffet Food that leads to food wastage.
- Top 5 Products that were cancelled were:

Product Name	Cancellation Count
Breakfast	362
Veg Lunch	338
Ginger Tea	128
Masala Dosa	128
Tea	104
Total	10077

(3) Quantity Wise Analysis



Findings:

- Orders of greater quantities are less likely to be cancelled.
- We should run offers like Buy more save more to minimize the cancellation.

Quantities Ordered	Count of Cancellation
1	7972
2	1349
3	400
4	165
5	75
6	55
7	24
8	14
10	12
Total	10077

(4) Revenue Based Analysis

Total Revenue Lost – Rs 5,81,000 in 5 days.

Restaurant ID	Lost Revenue
1002	₹1,15,771.70
1302	₹86,907.85
1145	₹35,528.00
1129	₹29,534.00
1282	₹25,866.00
1117	₹21,685.00
1091	₹21,392.02
1135	₹21,262.15
1084	₹20,853.00
Total	₹5,80,139.08

From Here, We find that in 5 days, we have lost around Rs. 5,80,140 revenue due to cancellation of orders and the significant restaurants are mentioned above.

Step 2: Insights and Recommendations :

- 1) Restaurant Engagement – High cancellation rates for specific restaurants might indicate operational issues or poor communication.
- 2) Reason For Rejection – Since two main reason were “Stock Shortage”, “Item Unavailable” then restaurants should be guided to update the availability on the app prior to accepting orders.
- 3) Cancellation By Restaurants - 5 restaurants out of total 97, 1135, 1084, 1002, 1282, 1129

made 50% of the total cancellation made by restaurants. These restaurants should be advised to update their stock regularly.

- 4) Cancellation By Customers Through app – This is the biggest portion of total Cancellation. There should be a robust feedback mechanism to get to know about the reason of cancellation more deeply for the customer side.
- 5) Cancellation based on quantity – Orders with low quantity are more likely to be cancelled. So, there should be more focus on retaining the customers by giving them offers on quantity to reduce the cancellation.
- 6) Product Type – There are three type of products with buffet type having the highest number of cancellation. So, there should be a robust cancellation scheme for the type of product and a time window should be introduced in order to minimize the cancellation and food wastage. For packaged item, we should focus on quality control and accurate description.

- 7) User Communication – Transparency with users about the order status and potential delays.
- 8) Order Confirmation – Implement a two step confirmation. Once a customer places an order, send a confirmation notification to insure accurate choices before finalizing the order. Also, this can be done at the restaurant side.
- 9) Restaurant Training – Offer training session to restaurant staff on efficient order handling.
- 10) Flexible Cancellation Window should be introduced.

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