

CANCELLATION POLICY'S

CASE STUDY

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HUNGERBOX

Contents

- Overview
- Functioning of cancellation policy works
- Analysis of Dataset
- Reason of Cancellation
- Various SQL queries applied to find inferences
- Detailed analysis of SQL queries
- Insights of the gathered data
- Suggestive enhancements or modifications to the existing cancellation flow

Balancing satisfaction & Efficiency

- In the realm of food ordering platforms, the cancellation policy serves as a crucial axis between user contentment and operational efficacy
- Our platform's current cancellation policy spans diverse food categories: packaged, buffet, and non-MRP items

Who Cancels the order ?

Users

Users can cancel packaged and buffet items while other items are cancellable until restaurant acceptance

Restaurants

Restaurant can choose to cancel the order until the order reaches the prepared stage

DataSet Definitions & Context

A.

Canceled Orders: Unveil insights dwelling within Order Time, Order Date, Order ID, Restaurant ID, Quantities Ordered, Cancellation Mode, and Reason of Rejection

B.

Product Details: Explain the interconnected nature of an Order ID, Product ID, Product Name, Item Price, Quantity, Total Value, Packaged Status, and Buffet Status.

SQL QUERIES & THEIR INFERENCES

What is SQL and why we need it ?



SQL

- SQL is a programming language for managing relational databases.
- In an order cancellation platform, it's used to store order data (cancelled order & products in this case)
- The purpose is to retrieve and update this data efficiently. SQL queries can swiftly identify and process order cancellation requests, aiding in managing and tracking cancellations.

1.

	Cancellation Mode	Reason of Rejection	Observations
▶	Order cancelled through app	Customer Refusal	7893
	Cancelled by Restaurant	Stock Shortage	858
	Cancelled by Restaurant	Item Unavailable	697
	Cancelled by Restaurant	Customer Refusal	391
	Cancelled by Restaurant	Closed Premises	133
	Cancelled by Restaurant	High Demand at the Restaurant	105

Since there are two ways of Cancellation of a product.

- By User - through the app
- By Restaurant

Reason of Rejection is further classified into sub-reasons and the number of Cancelled order is set as "Observations."

Result Grid | Filter Rows: Export: Wrap Cell Content:

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INFERENCES OF THE PREVIOUS QUERY

1. Order refused by the customers/users is much much higher than that of by the Restaurants.
2. Shortage and unavailability are major reasons behind cancellation by the Restaurant side.

Restaurant ID	Product Name	cancellation_count
1002	Egg To Order	38
1135	Tea	20
1002	Lunch Combo	19
1303	Dinner Buffet	17
1135	Sabudan Khichadi With Curd	17
1135	Aloo Paratha With Curd	15
1463	Parotta (4 Nos) With Veg Gravy	14
1391	Regular	12
1135	Chicken Dum Biryani	12
1135	Single Pav (30 To 35 Gms) (1 pc)	11
1302	Bisibele Bath	11

Most Cancelled items by the Users

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2.

Most Cancelled items by the Restaurants

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Restaurant ID	Product Name	cancellation_count
1002	Breakfast	254
1002	Veg Lunch	211
1002	Combo (Limited Meals)	94
1395	Breakfast	82
1002	North Lunch (Veg)	76
1002	Veg Thali with veg special	57
1002	Non-Veg Lunch	49
1200	Delightful Classic Cold Coffee	46
1302	Ginger Tea	46
1282	Veg Lunch	46
1302	Masala Dosa	42

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	1391	Regular	12
	1135	Chicken Dum Biryani	12
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INFERENCES OF THE PREVIOUS QUERY

1. Users generally cancel those items which can be termed as proper-meal. Change of plans lead to cancellation of items.
2. Restaurants tend to cancel those order in which either there is a huge crowd, e.g, tea or unavailability leads to cancellation.

3.

	Restaurant ID	total_cancellations	cancellation_percentage
▶	1002	1739	22.03218
	1302	1284	16.26758
	1200	634	8.03243
	1129	569	7.20892
	1145	405	5.13113
	1117	328	4.15558
	1282	327	4.14291
	1284	323	4.09223
	1084	248	3.14202
	1395	219	2.77461

The above provided output is a list of top 10 restaurants and their total cancellations and their share out of all the cancellations.

Only 2 restaurants constitutes the maximum percentage of cancellations i.e, 38.29976%.

4.

	order_hour	cancellation_count
▶	13	2545
	12	1084
	14	1003
	17	761
	16	642
	9	585
	18	535
	8	432
	15	417
	20	349

Here we have the count of cancellations during the different hours.

The afternoon witness the most amount of cancellations and that is because a great amount of food items is being ordered during the lunch hour.

5.

	Restaurant ID	Product Name	Reason of Rejection	cancellation_count
▶	1135	Sabudan Khichadi With Curd	Item Unavailable	16
	1463	Parotta (4 Nos) With Veg Gravy	Stock Shortage	13
	1391	Regular	Stock Shortage	12
	1135	Chicken Dum Biryani	Item Unavailable	12
	1302	Bisibele Bath	Item Unavailable	11
	1104	Fresh Fruit Juice	Closed Premises	9
	1135	Aloo Paratha With Curd	High Demand at the Restaurant	9
	1145	Aloo Samosa	Stock Shortage	7
	1135	Single Pav (30 To 35 Gms) (1 pc)	Item Unavailable	7
	1135	Chapati	Item Unavailable	7
	1135	Tea	Stock Shortage	6

This is the top items that are being cancelled by the Restaurant with reasons other than Customer Refusal.

We know that "Customer Refusal" is also one of the reasons by the Restaurants as well as users.

6.

	Restaurant ID	selling_potential
▶	1002	157590
	1302	145737
	1091	69066
	1129	64632
	1135	48443
	1117	47666
	1145	39078
	1084	34192
	1282	33665
	1378	20480

Lost selling potential is the revenue not realized due to missed sales opportunities.

Inference - This is that potential which got cancelled for various reasons. And just by looking at it closely, we find the IMPORTANCE of this STUDY. These are all the data items which would never have generated.

7.

	Avg_Buffet_Cancellation_Rate	Avg_Packaged_Cancellation_Rate	Avg_BothCancellation_Rate
▶	0.6727	0.0465	0.0465

Average Cancellation Rate, Average Packaged Cancellation Rate and Average both Cancellation Rate are all provided. It clear that the Buffet has higher rate than Packaged or Both even at the same time.

Suggestions for Enhancement & Modifications

1.

To avoid cancellations through "High Demand at the Restaurant", we would like to add a "**Queue Filled**" button on the app. Its icon would be visible once the queue for the order is at its threshold.

After some time, say 30 minutes, the application would be out of Sleep Mode and then again users will be able to place their orders again.

Suggestions for Enhancement & Modifications

2.

We want to empower our "Ground - work- force ". What we want to do does not require huge amount of capital, what it requires is huge amount of motivation.

To support the education of the children of our Ground-work-partners, we would like to add a scheme on the application and that is "Edu-Incentives." People could donate through that scheme and help our warriors and their little ones on the ground.

Suggestions for Enhancement & Modifications

3.

Real-time Order Updates:

Provide customers with live order preparation status, reducing uncertainty, cancellations, and the wait times.

Enhances customer overall experience, loyalty, and worker efficiency. Monitor success through lower cancellations, positive reviews, and improved operations.

Adjust based on feedback for ongoing enhancements and modifications.

Suggestions for Enhancement & Modifications

4..

SQL-based Dynamic Order Status Sync:

To synchronize real-time order updates, use SQL and a "Order_Status" table. Use SQL triggers to change statuses ("Received," "Preparation," "Ready"). Customers can then see these live updates via backend APIs, reducing uncertainty and cancellations. Improve staff allocation and resource use. During peak hours, keep an eye on SQL query performance and database load. Examine query execution strategies for efficiency on a regular basis.

Suggestions for Enhancement & Modifications

Restaurant Insights Dashboard: 5

Offer restaurants an easy-to-use dashboard in their accounts. It shows order trends, cancellations, and customer feedback and thus the Restaurants updated with how they are performing.

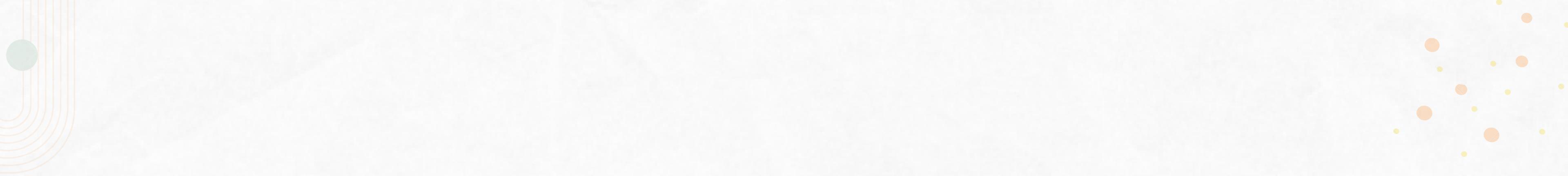
They'll gather data to find their strengths and areas to improve. The dashboard also suggests menu tweaks based on popular items, boosting customer happiness. Regular updates keep it helpful for smarter decisions.

Tech used for the complete Case Study

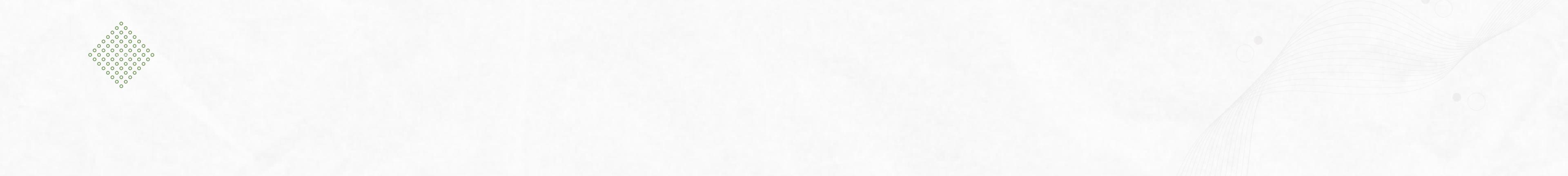
- MS EXCEL
- MySQL
- Slides
- Understanding of DBMS

Conclusion -

We effectively compared and synchronized the data sheets by employing MySql queries and understanding their functioning. The data sheds light on restaurant performance, user behavior, and the effectiveness of the program. Real-time order updates improve the customer experience, while the analytics dashboard enables eateries to refine their offers. Continuous monitoring and refining will result in higher customer satisfaction and more efficient operations.



WE WANT TO SAY
THANK YOU



FOR YOUR ATTENTION