



**Ambika Pandey**

# PIZZA SALES REPORT

## OBJECTIVE

**THIS REPORT LEVERAGES SQL QUERIES WITHIN SSMS TO COMPREHENSIVELY ANALYZE PIZZA SALES DATA. THE ANALYSIS AIMS TO IDENTIFY KEY TRENDS, CUSTOMER PREFERENCES, AND AREAS FOR IMPROVEMENT, ULTIMATELY EMPOWERING DATA-DRIVEN DECISION-MAKING TO BOOST SALES PERFORMANCE, OPTIMIZE OPERATIONS, SUPPORT STRATEGIC PLANNING.**

# TABLE SCHEMA

**ORDER\_DETAILS**

order_details_id	order_id	pizza_id	quantity
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**ORDERS**

order_id	date	time
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**PIZZA\_TYPES**

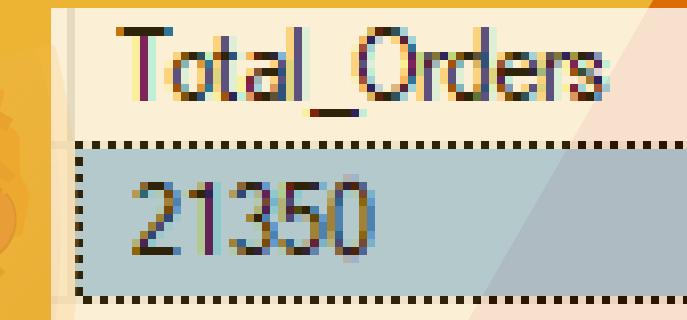
pizza_type_id	name	category	ingredients
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**PIZZAS**

pizza_id	pizza_type_id	size	price
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- RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

**SELECT COUNT(ORDER\_ID) AS TOTAL\_ORDERS FROM [dbo].[ORDERS]**



- CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

**SELECT ROUND(SUM(OD.QUANTITY\*P.PRICE),2) AS TOTAL\_REVENUE FROM [dbo].[PIZZAS] P INNER JOIN [dbo].[ORDER\_DETAILS] OD ON OD.PIZZA\_ID=P.PIZZA\_ID**



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**IDENTIFY THE HIGHEST-PRICED PIZZA.**

**SELECT \* FROM PIZZAS WHERE PRICE = (SELECT MAX(PRICE) FROM PIZZAS)**

pizza_id	pizza_type_id	size	price
the_greek_xxL	the_greek	XXL	35.9500007629395

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**IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.**

**SELECT TOP 1 P.SIZE, SUM(OD.QUANTITY) AS ORDER\_COUNT FROM PIZZAS P  
INNER JOIN [DBO].[ORDER\_DETAILS] OD ON P.PIZZA\_ID=OD.PIZZA\_ID  
GROUP BY P.SIZE ORDER BY SUM(OD.QUANTITY) DESC**

size	Order_count
L	18956

- LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES

```
SELECT TOP 5 PT.NAME, SUM(OD.QUANTITY) AS TOTAL_ORDERS  
FROM  
[dbo].[ORDER_DETAILS] OD INNER JOIN [dbo].[PIZZAS] P ON  
P.PIZZA_ID=OD.PIZZA_ID INNER JOIN [dbo].[PIZZA_TYPES] PT  
ON PT.PIZZA_TYPE_ID=P.PIZZA_TYPE_ID  
GROUP BY PT.NAME  
ORDER BY SUM(OD.QUANTITY) DESC
```

Name	Total_orders
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

- JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT PT.CATEGORY, SUM(OD.QUANTITY) AS TOTAL_QUANTITY  
FROM  
[dbo].[ORDER_DETAILS] OD INNER JOIN [dbo].[PIZZAS] P ON  
P.PIZZA_ID=OD.PIZZA_ID INNER JOIN [dbo].[PIZZA_TYPES] PT  
ON PT.PIZZA_TYPE_ID=P.PIZZA_TYPE_ID  
GROUP BY PT.CATEGORY  
ORDER BY SUM(OD.QUANTITY) DESC
```

	Category	Total_Quantity
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

- DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

**SELECT DATEPART(HOUR,TIME) AS ORDER\_TIME, COUNT(ORDER\_ID) AS ORDERS\_PER\_HOUR FROM [ORDERS]  
GROUP BY DATEPART(HOUR,TIME) ORDER BY ORDERS\_PER\_HOUR DESC**

	Order_Time	Orders_Per_Hour
1	12	2520
2	13	2455
3	18	2399
4	17	2336
5	19	2009
6	16	1920
7	20	1642
8	14	1472
9	15	1468
10	11	1231
11	21	1198
12	22	663
13	23	28
14	10	8
15	9	1

- DETERMINE THE DISTRIBUTION OF AVG ORDERS BY DAY OF THE WEEK.

```
SELECT ORDER_DAY, AVG(ORDERS_PER_DAY) AS  
AVG_ORDERS_PER_DAY FROM  
(SELECT DATENAME(dw,date) AS ORDER_DAY, COUNT(ORDER_ID) AS  
ORDERS_PER_DAY FROM [ORDERS]  
GROUP BY DATENAME(dw,date)) A  
GROUP BY ORDER_DAY
```

	Order_Day	Avg_Orders_Per_Day
1	Saturday	3158
2	Wednesday	3024
3	Monday	2794
4	Sunday	2624
5	Friday	3538
6	Thursday	3239
7	Tuesday	2973

- GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT AVG(TOTAL_ORDERS_PER_DAY) AS AVG_ORDERS_PER_DAY  
      FROM  
(SELECT O.DATE AS ORDER_DATE, SUM(OD.QUANTITY) AS  
       TOTAL_ORDERS_PER_DAY  
      FROM [dbo].[ORDER_DETAILS] OD  
INNER JOIN [dbo].[ORDERS] O ON OD.ORDER_ID=O.ORDER_ID  
     GROUP BY O.DATE ) TOTAL_ORDERS
```



- DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```
SELECT TOP 3 PT.NAME, SUM(P.PRICE*OD.QUANTITY) AS REVENUE  
      FROM [dbo].[PIZZAS] P  
INNER JOIN [dbo].[ORDER_DETAILS] OD  
ON P.PIZZA_ID=OD.PIZZA_ID INNER JOIN [dbo].[PIZZA_TYPES] PT ON  
PT.PIZZA_TYPE_ID =P.PIZZA_TYPE_ID  
      GROUP BY PT.NAME  
      ORDER BY SUM(P.PRICE*OD.QUANTITY) DESC
```

	name	revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5

- CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
SELECT PT.CATEGORY,  
CONCAT(ROUND(SUM(P.PRICE*OD.QUANTITY)*100 / ( SELECT  
SUM(P.PRICE*OD.QUANTITY) AS TOTAL_REVENUE  
FROM  
[DBO].[ORDER_DETAILS] OD INNER JOIN [DBO].[PIZZAS] P ON  
OD.PIZZA_ID=P.PIZZA_ID),2),'%') AS REVENUE_PER_CATEGORY  
FROM [DBO].[PIZZA_TYPES] PT INNER JOIN [DBO].[PIZZAS] P ON  
P.PIZZA_TYPE_ID=PT.PIZZA_TYPE_ID  
INNER JOIN [DBO].[ORDER_DETAILS] OD ON OD.PIZZA_ID=P.PIZZA_ID  
GROUP BY PT.CATEGORY ORDER BY REVENUE_PER_CATEGORY DESC
```

	category	Revenue_per_category
1	Classic	26.91%
2	Supreme	25.46%
3	Chicken	23.96%
4	Veggie	23.68%

- ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
SELECT ORDER_DATE,ROUND(REVENUE,2) AS REVENUE_PER_DAY,  
ROUND(SUM(REVENUE) OVER(ORDER BY ORDER_DATE),2) AS  
CUMULATIVE_REVENUE FROM  
(SELECT O.DATE AS ORDER_DATE, SUM(P.PRICE*OD.QUANTITY) AS  
REVENUE  
FROM [dbo].[PIZZAS] P  
INNER JOIN [dbo].[ORDER_DETAILS] OD  
ON P.PIZZA_ID=OD.PIZZA_ID INNER JOIN[dbo].[ORDERS] O ON  
O.ORDER_ID =OD.ORDER_ID  
GROUP BY O.DATE) NEW_SALES
```

Order_date	Revenue_Per_Day	Cumulative_Revenue
2015-01-01	2713.85	2713.85
2015-01-02	2731.9	5445.75
2015-01-03	2662.4	8108.15
2015-01-04	1755.45	9863.6

- DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

WITH CTE AS(

```
SELECT PT.CATEGORY,PT.NAME , SUM(P.PRICE*OD.QUANTITY) AS REVENUE, DENSE_RANK() OVER(PARTITION BY PT.CATEGORY ORDER BY
SUM(P.PRICE*OD.QUANTITY) DESC) AS RN
FROM [DBO].[PIZZAS] P
INNER JOIN [DBO].[ORDER_DETAILS] OD
ON P.PIZZA_ID=OD.PIZZA_ID INNER JOIN [DBO].[PIZZA_TYPES] PT ON PT.PIZZA_TYPE_ID =P.PIZZA_TYPE_ID
GROUP BY PT.NAME, PT.CATEGORY)
SELECT * FROM CTE WHERE RN<=3
```

Category	Name	Revenue	RN
Chicken	The Thai Chicken Pizza	43434.25	1
Chicken	The Barbecue Chicken Pizza	42768	2
Chicken	The California Chicken Pizza	41409.5	3
Classic	The Classic Deluxe Pizza	38180.5	1
Classic	The Hawaiian Pizza	32273.25	2
Classic	The Pepperoni Pizza	30161.75	3
Supreme	The Spicy Italian Pizza	34831.25	1
Supreme	The Italian Supreme Pizza	33476.75	2
Supreme	The Sicilian Pizza	30940.5	3
Veggie	The Four Cheese Pizza	32265.7010040283	1
Veggie	The Mexicana Pizza	26780.75	2
Veggie	The Five Cheese Pizza	26066.5	3

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## FIND THE MOM % GROWTH OF REVENUE.

WITH CTE AS(

```
SELECT MONTH(O.DATE) AS ORDER_MONTH,DATENAME(MONTH,O.DATE) AS MONTH_NAME,ROUND(SUM(P.PRICE*OD.QUANTITY),2) AS
REVENUE
FROM [dbo].[PIZZAS] P
INNER JOIN [dbo].[ORDER_DETAILS] OD
ON P.PIZZA_ID=OD.PIZZA_ID INNER JOIN [dbo].[PIZZA_TYPES] PT ON PT.PIZZA_TYPE_ID =P.PIZZA_TYPE_ID
INNER JOIN [dbo].[ORDERS] O ON O.ORDER_ID=OD.ORDER_ID
GROUP BY MONTH(O.DATE),DATENAME(MONTH,O.DATE)
),
```

CTE2 AS ( SELECT \*, LAG(REVENUE,1,REVENUE) OVER(ORDER BY ORDER\_MONTH) AS PRE\_MONTH\_REVENUE FROM CTE)

```
SELECT *,CONCAT(ROUND((REVENUE-PRE_MONTH_REVENUE)*100/PRE_MONTH_REVENUE,2),'%') AS REVENUE_GROWTH FROM CTE2
```

Order_Month	Month_name	Revenue	Pre_Month_Revenue	Revenue_Growth
1	January	69793.3	69793.3	0%
2	February	65159.6	69793.3	-6.64%
3	March	70397.1	65159.6	8.04%
4	April	68736.8	70397.1	-2.36%
5	May	71402.75	68736.8	3.88%
6	June	68230.2	71402.75	-4.44%
7	July	72557.9	68230.2	6.34%
8	August	68278.25	72557.9	-5.9%
9	September	64180.05	68278.25	-6%
10	October	64027.6	64180.05	-0.24%
11	November	70395.35	64027.6	9.95%
12	December	64701.15	70395.35	-8.09%

## INSIGHTS

- **TOTAL ORDERS : 21350**
- **TOTAL REVENUE : \$ 817860**
- **HIGHEST PRICED PIZZA : \$ 35.95**
- **MOST COMMON SIZE PIZZA ORDERED AND ORDER NUMBER : L AND 18956**
- **TOP SELLING PIZZA NAME : THE CLASSIC DELUXE PIZZA**
- **TOP SELLING PIZZA CATEGORY AND QUANTITY : CLASSIC, 14888**
- **TOP ORDERED PIZZA TIME : 12, 2520**
- **DAY OF THE WEEK WITH HIGHEST AVERAGE PIZZA SOLD : SATURDAY, 3158**
- **AVERAGE ORDERS PER DAY : 138**
- **TOP 3 PIZZA TYPES BY REVENUE : THE THAI CHICKEN PIZZA, THE BARBECUE CHICKEN PIZZA, THE CALIFORNIA CHICKEN PIZZA**
- **TYPE AND % OF TOP SELLING PIZZA : CLASSIC, 26.91%**
- **HIGHEST GROWTH % AND MONTH NAME : 9.95%, NOVEMBER**
- **HIGHEST DEGROWTH % AND MONTH NAME : (-6%), SEPTEMBER**



Thank  
you!