



Pizza Sales Analysis

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Purpose and Overview of Analysis

The purpose of this analysis is to gain insights into the sales performance of the pizza store. By examining the data, the aim is to identify trends, uncover opportunities for growth, and make informed business decisions to enhance our operational efficiency and increase revenue.



Dataset Structure



order_details

public
order_details
order_details_id
order_id
pizza_id
quantity

pizza_orders

public
pizza_orders
order_id
date
time
day_of_week
month_name

pizza_types

public
pizza_types
pizza_type_id
name
category
ingredients


pizza_details

public
pizza_details
pizza_id
pizza_type_id
size
price

1. How many total orders have been placed?

Total Orders

```
SELECT COUNT(*) AS total_orders FROM pizza_orders
```

	total_orders 
1	21350






2. How many orders were placed on each date?

Order Frequency


```
SELECT date, day_of_week, COUNT(*) AS order_count FROM
pizza_orders
GROUP BY date, day_of_week ORDER BY order_count DESC
```



	date 	day_of_week 	order_count 
	date	character varying (10)	bigint
1	2022-11-27	Sunday	115
2	2022-11-26	Saturday	113
3	2022-10-15	Saturday	107
4	2022-07-04	Monday	105
5	2022-05-15	Sunday	94
6	2022-07-03	Sunday	93
7	2022-02-01	Tuesday	87
8	2022-10-01	Saturday	84
9	2022-07-17	Sunday	82
10	2022-08-14	Sunday	81
11	2022-09-11	Sunday	77
12	2022-12-18	Sunday	76

3. What is the total sales generated from all orders?

```
SELECT SUM(od.quantity * pd.price) AS total_sales
FROM pizza_details AS pd
JOIN order_details AS od ON pd.pizza_id = od.pizza_id
```


	total_sales numeric 
1	817860.05



4. What is the average value of an order?

```
Average Order Value

WITH order_values AS (
  SELECT po.order_id, SUM(od.quantity * pd.price) AS
  order_value
  FROM pizza_orders po
  JOIN order_details od ON po.order_id = od.order_id
  JOIN pizza_details pd ON od.pizza_id = pd.pizza_id
  GROUP BY po.order_id
)
SELECT ROUND(AVG(order_value),2) AS average_order_value
FROM order_values
```

	average_order_value 
1	38.31



5. What is the daily revenue generated?

Daily Revenue

```
SELECT po.date, SUM(od.quantity * pd.price) AS  
daily_revenue  
FROM pizza_orders po  
JOIN order_details od ON po.order_id = od.order_id  
JOIN pizza_details pd ON od.pizza_id = pd.pizza_id  
GROUP BY po.date  
ORDER BY po.date;
```



	date date	daily_revenue numeric
1	2022-01-01	2713.85
2	2022-01-02	2731.90
3	2022-01-03	2662.40
4	2022-01-04	1755.45
5	2022-01-05	2065.95
6	2022-01-06	2428.95
7	2022-01-07	2202.20
8	2022-01-08	2838.35
9	2022-01-09	2127.35
10	2022-01-10	2463.95

6. What is the revenue generated from each type of pizza?

Revenue per Pizza Type

```
SELECT pt.name, SUM(od.quantity * pd.price) AS  
total_revenue  
FROM pizza_types pt  
JOIN pizza_details pd ON pt.pizza_type_id =  
pd.pizza_type_id  
JOIN order_details od ON pd.pizza_id = od.pizza_id  
GROUP BY pt.name  
ORDER BY total_revenue DESC
```



	name character varying (100)	total_revenue numeric
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768.00
3	The California Chicken Pizza	41409.50
4	The Classic Deluxe Pizza	38180.50
5	The Spicy Italian Pizza	34831.25
6	The Southwest Chicken Pizza	34705.75
7	The Italian Supreme Pizza	33476.75
8	The Hawaiian Pizza	32273.25
9	The Four Cheese Pizza	32265.70
10	The Sicilian Pizza	30940.50
11	The Pepperoni Pizza	30161.75

7. Rank pizzas based on their popularity

```
Popular Pizza

SELECT name,
       COUNT(order_details_id) AS order_count,
       RANK() OVER (ORDER BY COUNT(order_details_id)
DESC) AS popularity_rank
FROM pizza_types
JOIN pizza_details ON pizza_types.pizza_type_id =
pizza_details.pizza_type_id
JOIN order_details ON pizza_details.pizza_id =
order_details.pizza_id
GROUP BY name
```



name	order_count	popularity_rank
character varying (100)	bigint	bigint
The Classic Deluxe Pizza	2416	1
The Barbecue Chicken Pizza	2372	2
The Hawaiian Pizza	2370	3
The Pepperoni Pizza	2369	4
The Thai Chicken Pizza	2315	5
The California Chicken Pizza	2302	6
The Spicy Italian Pizza	1887	7
The Sicilian Pizza	1887	7
The Southwest Chicken Pizza	1885	9
The Four Cheese Pizza	1850	10
The Italian Supreme Pizza	1849	11

8. Compare sales between weekdays and weekends

```
Compare Sales

SELECT
  CASE
    WHEN day_of_week IN ('Saturday', 'Sunday') THEN 'Weekend'
    ELSE 'Weekday'
  END AS day_type,
  SUM(od.quantity * pd.price) AS total_sales
FROM pizza_orders po
JOIN order_details od ON po.order_id = od.order_id
JOIN pizza_details pd ON od.pizza_id = pd.pizza_id
GROUP BY day_type
```

	day_type text 🔒	total_sales numeric 🔒
1	Weekend	259602.40
2	Weekday	558257.65



9. Compare the sales and revenue generated by different pizza sizes



Pizza Size Analysis

```
SELECT size, COUNT(od.quantity) AS total_pizzas_sold,  
SUM(od.quantity * pd.price) AS total_revenue  
FROM order_details od  
JOIN pizza_details pd ON od.pizza_id = pd.pizza_id  
GROUP BY size
```

	size character varying (10) 🔒	total_pizzas_sold bigint 🔒	total_revenue numeric 🔒
1	S	14137	178076.50
2	XXL	28	1006.60
3	XL	544	14076.00
4	M	15385	249382.25
5	L	18526	375318.70



10. Which category of pizza is least selling?

Least Sold Pizza Category

```
SELECT pt.category, COUNT(od.order_details_id) AS total_orders
FROM pizza_types pt
LEFT JOIN pizza_details pd ON pt.pizza_type_id = pd.pizza_type_id
LEFT JOIN order_details od ON pd.pizza_id = od.pizza_id
GROUP BY pt.category
ORDER BY total_orders
```

	category character varying (50) 🔒	total_orders bigint 🔒
1	Chicken	10815
2	Veggie	11449
3	Supreme	11777
4	Classic	14579



Conclusion

- **Average Order Value:** The average order value provides insight into typical customer spending, which is around \$38.31.
- **Sales Comparison:** Total sales on weekdays are almost double those on weekends.
- **Pizza Size Analysis:** Large-sized pizzas contribute the most to revenue, indicating a strong customer preference for this size. On the other hand, extra-large pizzas are the least popular.
- **Popular Pizza Types:** Thai Chicken pizza is among the top sellers, suggesting a strong customer preference for this flavor.
- **Least Sold Categories:** Chicken pizzas have the lowest sales among all categories.