EXPLORING PIZZA SALES DATA WITH SQL

ABOUT

Hello! This project explores important business problems in the dataset and presents practical solutions.

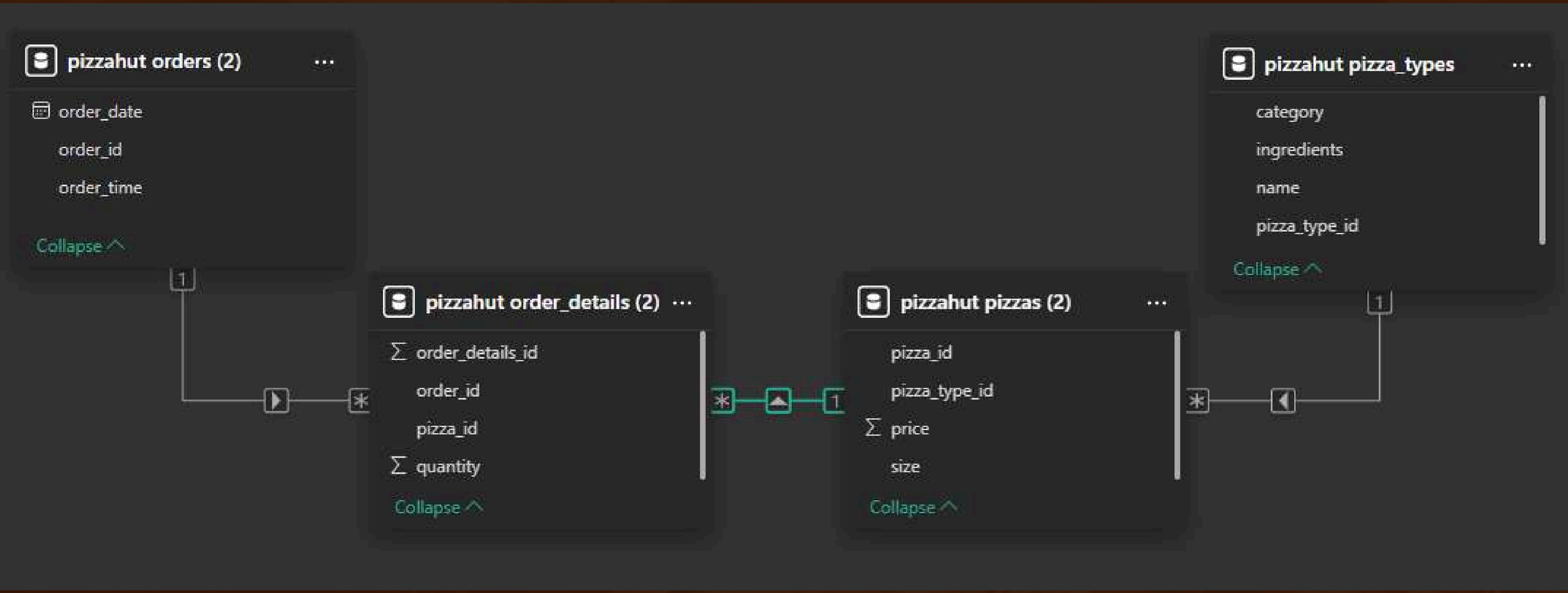
order_	order_id	pizza_id	quantity
36	15	big_meat_s	1
56	20	big_meat_s	1
79	32	big_meat_s	1
101	42	big_meat_s	1
150	64	big_meat_s	1
174	76	big_meat_s	1
180	78	big_meat_s	1

rder_id	order_date	order_time
19402	27 November 2015	11:21:5
19403	27 November 2015	11:29:5
19404	27 November 2015	11:32:4
19405	27 November 2015	11:36:3
19406	27 November 2015	11:46:4
19407	27 November 2015	11:47:3
19408	27 November 2015	11:54:4
19409	27 November 2015	12:02:5

pizza_type_	name	catego	ingredients
bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, Tomatoes, Red
cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno Peppers, Fontina Ch
ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms, Asiago Cheese, A
ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garlic, Pesto Sauce
southw_ckn	The Southwest Chicken Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Red Onions, Jalapeno Peppers,
thai_ckn	The Thai Chicken Pizza	Chicken	Chicken, Pineapple, Tomatoes, Red Peppers, Thai Sweet Chilli Sau
big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sausage
classic_dlx	The Classic Deluxe Pizza	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon
hawaiian	The Hawaiian Pizza	Classic	Sliced Ham, Pineapple, Mozzarella Cheese
ital_cpclo	The Italian Capocollo Pizza	Classic	Capocollo, Red Peppers, Tomatoes, Goat Cheese, Garlic, Oregano
napolitana	The Napolitana Pizza	Classic	Tomatoes, Anchovies, Green Olives, Red Onions, Garlic
pep_msh_pep	The Pepperoni, Mushroom, and	Classic	Pepperoni, Mushrooms, Green Peppers

pizza_id	pizza_type_id	size	price
bbq_ckn_s	bbq_ckn	S	12.75
bbq_ckn_m	bbq_ckn	M	16.75
bbq_ckn_l	bbq_ckn	L	20.75
cali_ckn_s	cali_ckn	S	12.75
cali_ckn_m	cali_ckn	M	16.75
cali_ckn_l	cali_ckn	L	20.75
ckn_alfredo_s	ckn_alfredo	S	12.75
ckn_alfredo_m	ckn_alfredo	M	16.75
ckn_alfredo_l	ckn_alfredo	L	20.75
ckn_pesto_s	ckn_pesto	S	12.75

CO-RELATION OF TABLES WITH REACH OTHERS



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT count(order_id)
AS Total_no_of_Orders
FROM orders ;
```

	Total_no_of_Orders
▶	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```sql
SELECT ROUND(SUM((od.quantity*p.price)), 2) AS total_sales
FROM order_details AS od
JOIN pizzas AS p
ON p.pizza_id = od.pizza_id  ;
```

	total_sales
▶	817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

```sql
SELECT pt.name,  p.price AS pizza_price
FROM pizza_types AS pt
join pizzas AS p
ON pt.pizza_type_id = p.pizza_type_id
ORDER BY pizza_price DESC
LIMIT 1;
```

	name	pizza_price
▶	The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```sql
SELECT p.size, count(od.quantity) AS common_pizza_size
FROM order_details AS od
JOIN pizzas AS p
ON od.pizza_id = p.pizza_id
GROUP BY 1
ORDER BY p.size ;
```

	size	common_pizza_size
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

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

```sql
SELECT pt.name AS Pizza_Name , SUM(od.quantity) AS Total_Quantity
FROM pizza_types AS pt
JOIN pizzas AS p
ON pt.pizza_type_id = p.pizza_type_id
JOIN order_details AS od
ON od.pizza_id = p.pizza_id
GROUP BY pizza_name
ORDER BY total_quantity DESC
LIMIT 5 ;
```

Pizza_Name	Total_Quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT COUNT(order_id) AS total_orders,  HOUR(order_time) AS Order_time
FROM orders
GROUP BY HOUR(order_time) ;
```

	total_orders	Order_time
▶	1231	11
	2520	12
	2455	13
	1472	14
	1468	15
	1920	16
	2336	17

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
SELECT category, COUNT(name) AS numbers FROM pizza_types
GROUP BY 1 ;
```

	category	numbers
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

```sql
SELECT SUM(od.quantity) AS total_quantity , pt.name AS name
FROM order_details AS od
JOIN pizzas AS p
ON od.pizza_id = p.pizza_id
JOIN pizza_types AS pt
ON pt.pizza_type_id = p.pizza_type_id
GROUP BY name
ORDER BY  total_quantity DESC
LIMIT 5 ;
```

total_quantity	name
2453	The Classic Deluxe Pizza
2432	The Barbecue Chicken Pizza
2422	The Hawaiian Pizza
2418	The Pepperoni Pizza
2371	The Thai Chicken Pizza

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

```
SELECT ROUND(AVG(quantity), 0) AS avg_pizza_ordered_per_day FROM
(SELECT o.order_date, SUM(od.quantity) AS quantity
FROM orders AS o
JOIN order_details AS od
ON od.order_id = o.order_id
group by 1) AS order_quantity ;
```

	avg_pizza_ordered_per_day
▶	138

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

```sql
SELECT pt.name, SUM(od.quantity * p.price) AS revenue
FROM pizza_types AS pt
JOIN pizzas AS p
ON  p.pizza_type_id = pt.pizza_type_id
JOIN order_details AS od
ON od.pizza_id = p.pizza_id
GROUP BY  pt.name
ORDER BY revenue DESC
LIMIT 3 ;
```

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

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

```sql
SELECT pt.category, ROUND((SUM(od.quantity * p.price) / (  SELECT ROUND(SUM((od.quantity*p.price)), 2) AS total_sales
FROM order_details AS od
JOIN pizzas AS p
ON p.pizza_id = od.pizza_id  ) ) * 100, 2) AS revenue
FROM order_details AS od
JOIN  pizzas AS p
ON p.pizza_id = od.pizza_id
JOIN pizza_types AS pt
ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.category
ORDER BY  revenue  DESC ;
```

	category	revenue
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```sql
SELECT order_date, SUM(revenue) OVER(ORDER BY order_date) AS cumulative_revenue
FROM
(SELECT o.order_date, ROUND(SUM(od.quantity * p.price), 2) AS revenue
FROM order_details AS od
JOIN pizzas AS p
ON od.pizza_id = p.pizza_id
JOIN orders as o
ON o.order_id = od.order_id
GROUP BY o.order_date ) AS sales ;
```

order_date	cumulative_revenue
2015-01-01	2713.85
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05

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

```sql
SELECT name, revenue, rankk
FROM
(SELECT category, name, revenue, RANK() OVER(PARTITION BY category ORDER BY revenue DESC) AS rankk
FROM
(SELECT pt.category , pt.name, ROUND(SUM(od.quantity * p.price), 2) AS revenue
FROM order_details AS od
JOIN pizzas AS p
ON od.pizza_id = p.pizza_id
JOIN pizza_types AS pt
ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.category, pt.name ) AS a) AS b
WHERE rankk <= 3
```

name	revenue	rankk
The Thai Chicken Pizza	43434.25	1
The Barbecue Chicken Pizza	42768	2
The California Chicken Pizza	41409.5	3
The Classic Deluxe Pizza	38180.5	1
The Hawaiian Pizza	32273.25	2
The Pepperoni Pizza	30161.75	3
The Spicy Italian Pizza	34831.25	1

Pizza Resto Presentation

THANK YOU FOR ATTENTION

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