



Domino's®

Pizza Sale | SQL For Data Analysis Full Portfolio
Project | End-to-End SQL Project



Project Agenda: Optimizing Domino's Pizza Revenue through Data Analysis

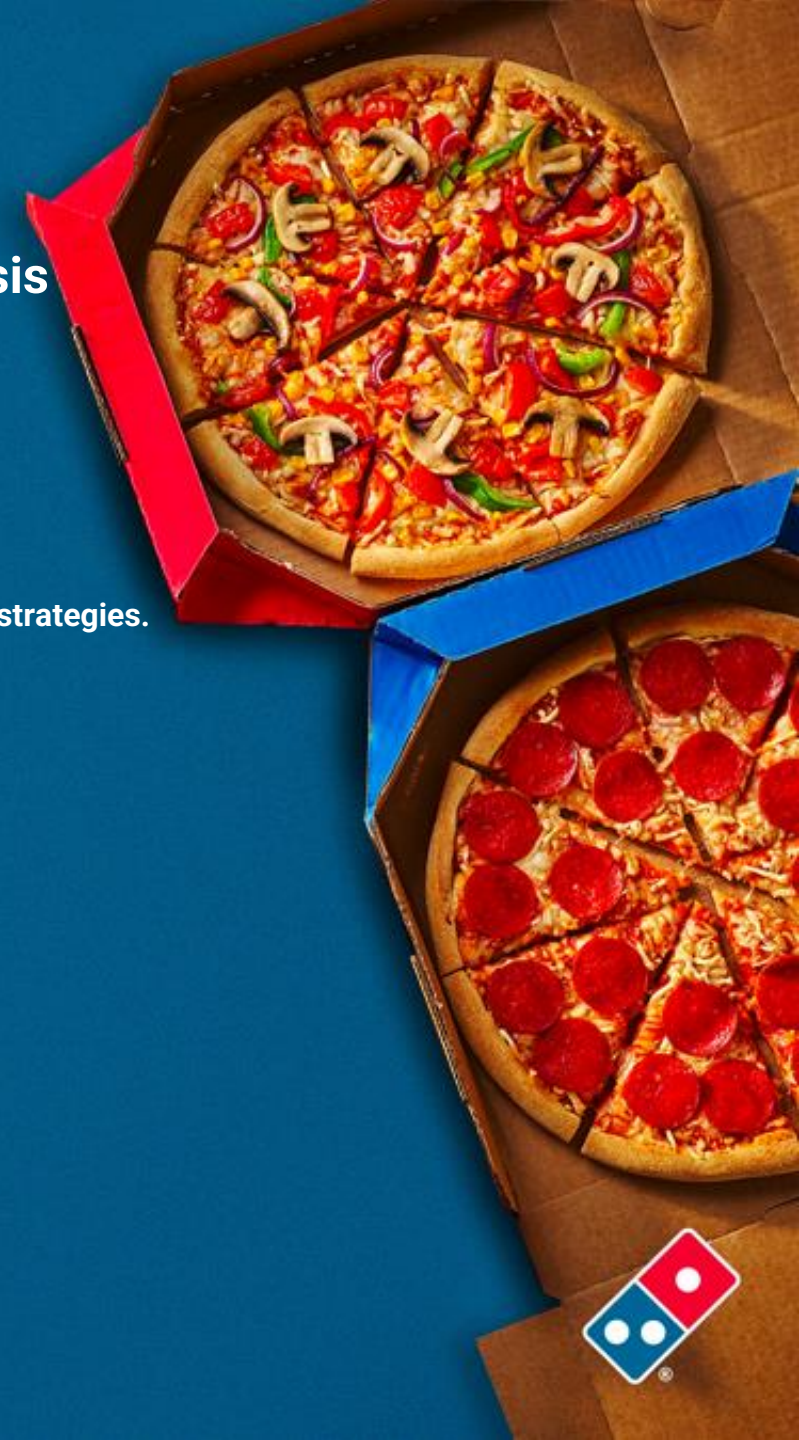
Company: Domino's Pizza

Project Goal:

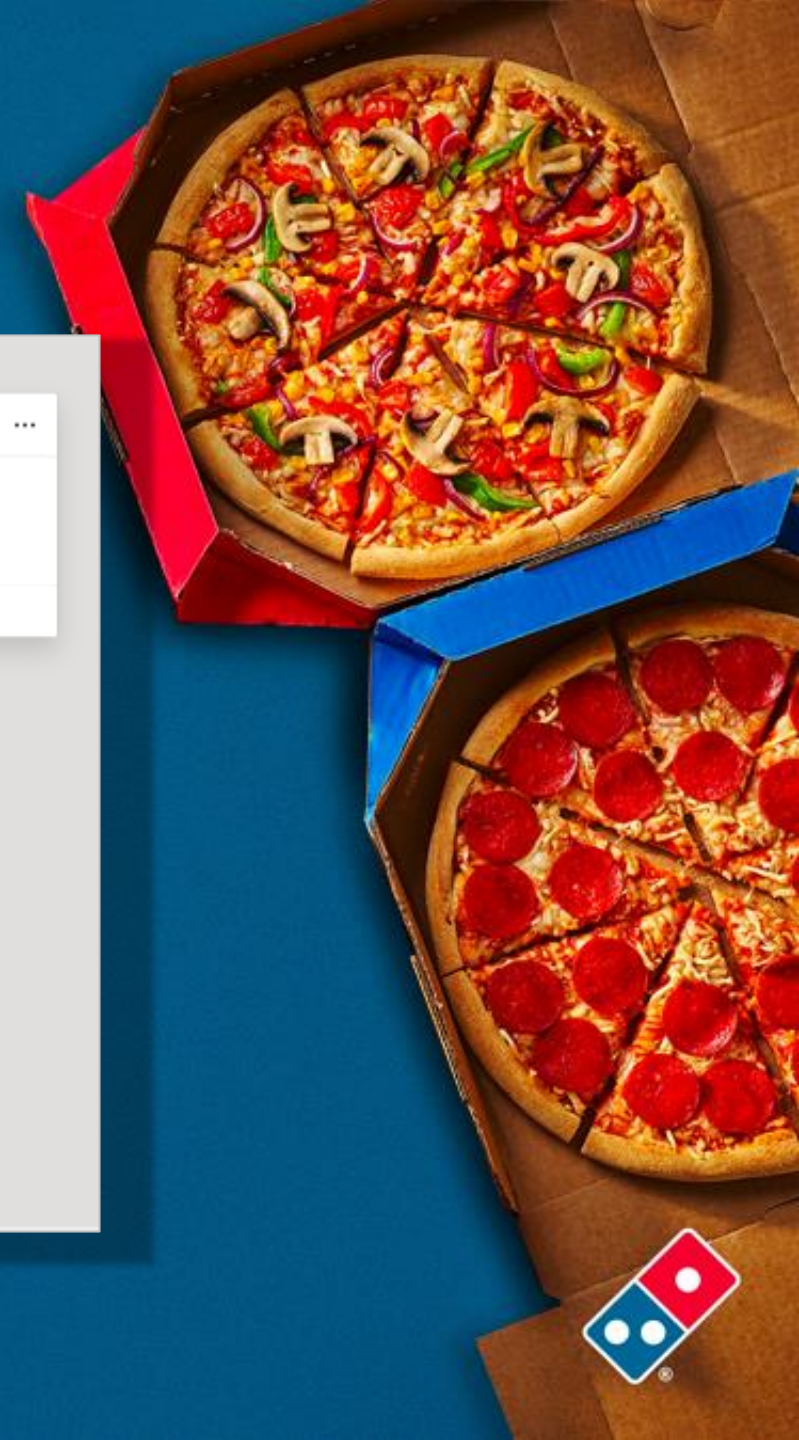
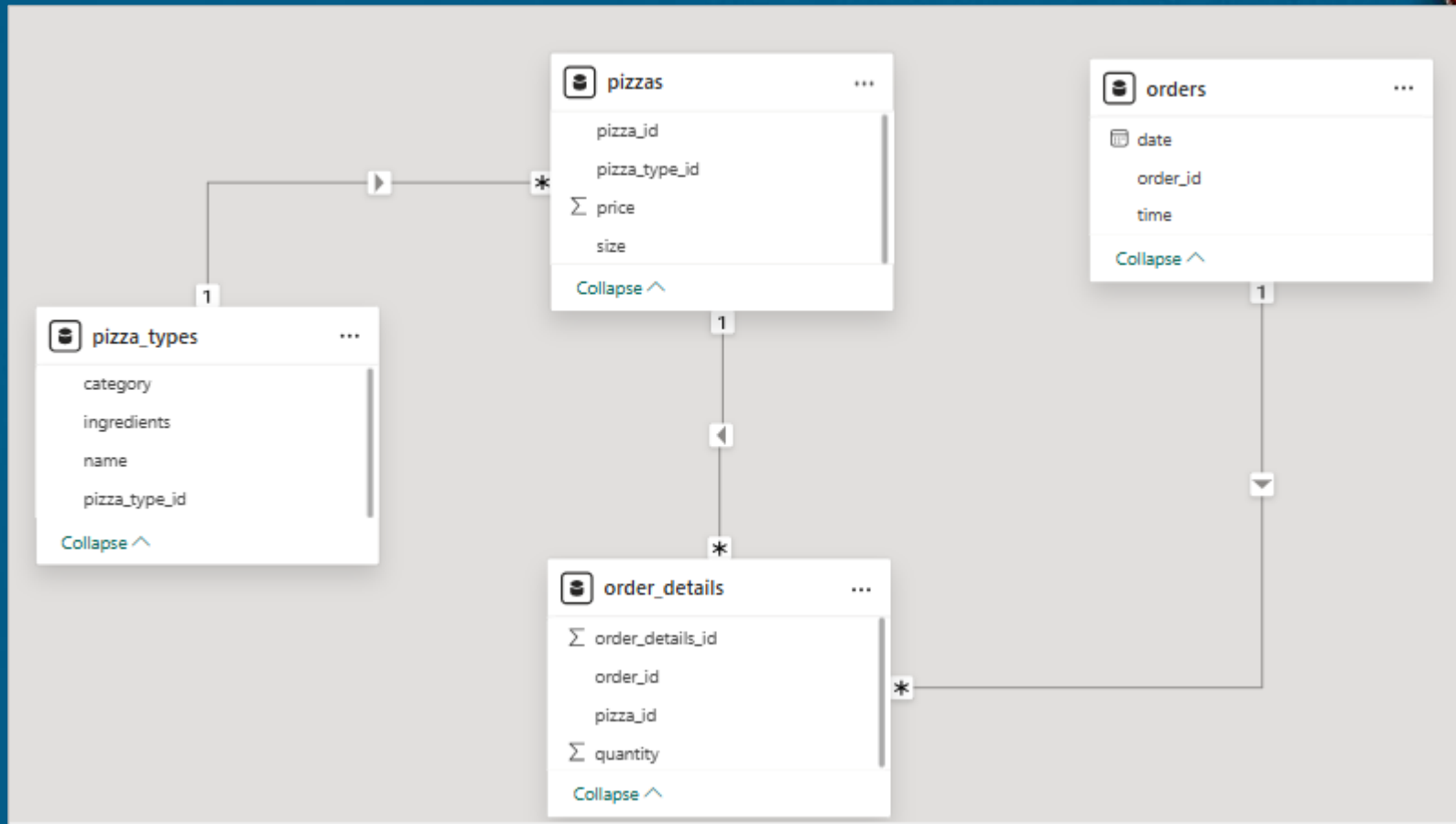
To leverage data analysis techniques to identify opportunities for revenue growth and optimize business strategies.

Deliverables:

- Comprehensive data analysis report
- Presentation summarizing key findings and recommendations
- Detailed implementation plan
- Ongoing performance monitoring reports



Information about the database used.



Over View

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.
- Join the necessary tables to find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day.
- Join relevant tables to find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.
- Calculate the percentage contribution of each pizza type to total revenue.
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza category.



Retrieve the total number of orders placed

```
• SELECT  
    COUNT(order_id) total_no_orders  
FROM  
    orders;
```


Result Grid	
	total_no_orders
▶	21350

Insights : 21350 of Total number of order is placed



Calculate the total revenue generated from pizza sales

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




Result Grid	
	revenue
▶	817860.05



Insights: The total revenue generated from pizza sales was ₹817,860.

Identify the highest-priced pizza.

```
SELECT
    pt.name, MAX(price) AS highest_price
FROM
    pizza_types pt
    JOIN
    pizzas p ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY highest_price DESC
LIMIT 1;
```



Result Grid			Filter Rows:
	name	highest_price	
▶	The Greek Pizza	35.95	

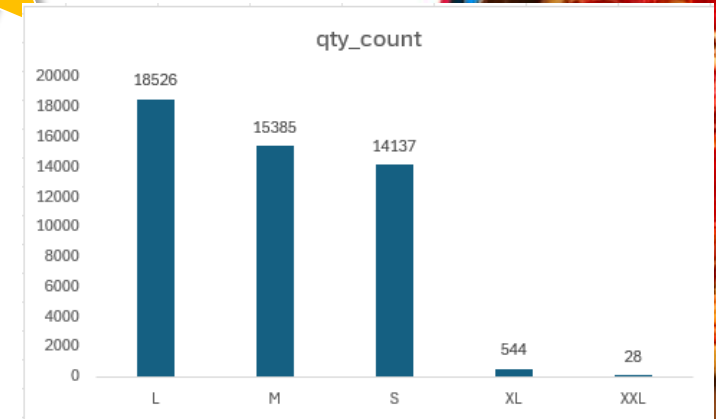
Insights: The highest priced pizza recorded was 'The Greek Pizza'



Identify the most common pizza size ordered.

```
SELECT
    p.size, COUNT(od.quantity) AS qty_count
FROM
    pizzas p
    JOIN
        order_details od ON p.pizza_id = od.pizza_id
GROUP BY p.size
ORDER BY qty_count DESC;
```

Result Grid			Filter
	size	qty_count	
▶	L	18526	
	M	15385	
	S	14137	
	XL	544	
	XXL	28	




Insights: 'L' is the most common pizza ordered with ordered quantity of 18526, followed by M,S,XL,XXL



List the top 5 most ordered pizza types along with their quantities

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




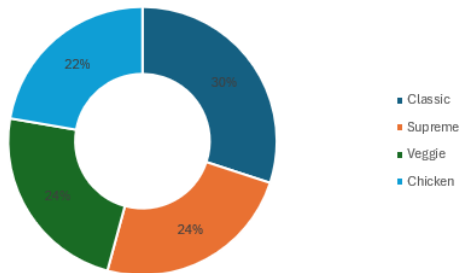
	name	Qty
▶	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

Insights: Top 5 most ordered pizza ranked are as follows



Join the necessary tables to find the total quantity of each pizza category ordered.

```
SELECT
    category, SUM(od.quantity) AS total_qty
FROM
    order_details od
    JOIN
    pizzas pz ON od.pizza_id = pz.pizza_id
    JOIN
    pizza_types pt ON pz.pizza_type_id = pt.pizza_type_id
GROUP BY category
ORDER BY total_qty DESC;
```




	category	total_qty
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

Insight : People are preferring classic over other pizza category which having total order of 14888 quantities

Join the necessary tables to find the total quantity of each pizza category ordered.

```
SELECT  
    HOUR(order_time) hours, COUNT(order_id)  
FROM  
    orders  
GROUP BY Hours;
```



	hours	count(order_id)
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009
	20	1642
	21	1198
	22	663
	23	28
	10	8
	9	1



Insight : People are preferring classic over other pizza category which having total order of 14888 quantities

Join relevant tables to find the category-wise distribution of pizzas.

```
SELECT  
    category, COUNT(name) count  
FROM  
    pizza_types  
GROUP BY category;
```

	category	count
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

Insight : Category wise distribution of pizzas



Group the orders by date and calculate the average number of pizzas ordered per day.

```
with cte as
(
  SELECT order_date ,sum(od.quantity) as total_qty
  FROM orders os
  join order_details od on os.order_id = od.order_id
  group by order_date)
select round(avg(total_qty),0) as Avg_order_per_day
from cte;
```


	Avg_order_per_day
▶	138

Insight : The average number of pizzas ordered per day is 138.



Determine the top 3 most ordered pizza types based on revenue.

```
SELECT
    pt.name, ROUND(SUM(od.quantity * pz.price), 0) AS revenue
FROM
    pizza_types pt
    JOIN
    pizzas pz ON pz.pizza_type_id = pt.pizza_type_id
    JOIN
    order_details od ON od.pizza_id = pz.pizza_id
GROUP BY pt.name
ORDER BY revenue DESC
LIMIT 3;
```

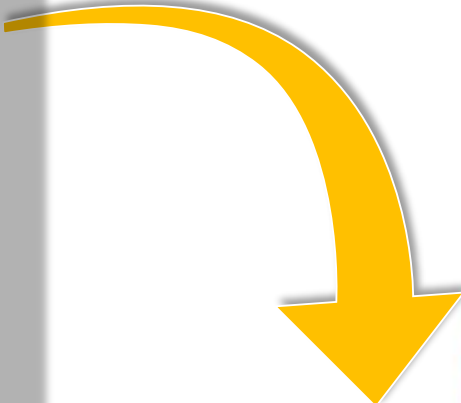


	name	revenue
▶	The Thai Chicken Pizza	43434
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41410

Insight : Most ordered pizza is 'The thai chicken pizza' with revenue of 43434/- followed by 'The Barbecue chicken pizza' and the 'California pizza'

Calculate the percentage contribution of each pizza type to total revenue.

```
WITH PizzaSales AS (  
    SELECT  
        pizza_types.category,  
        SUM(order_details.quantity * pizzas.price) AS category_sales  
    FROM pizza_types  
    JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
    JOIN order_details ON order_details.pizza_id = pizzas.pizza_id  
    GROUP BY pizza_types.category  
,  
TotalSales AS (  
    SELECT SUM(category_sales) AS total_sales  
    FROM PizzaSales  
)  
SELECT  
    PizzaSales.category,  
    CONCAT(ROUND((PizzaSales.category_sales / TotalSales.total_sales) * 100, 2), '%') AS revenue_percentage  
FROM PizzaSales, TotalSales  
ORDER BY revenue_percentage DESC;
```




	category	revenue_percentage
▶	Classic	26.91%
	Supreme	25.46%
	Chicken	23.96%
	Veggie	23.68%

Insight : The percentage contribution of each pizza by category to total revenue, where classic contributes around 26.91% followed by supreme , chicken ,veggie.

Analyze the cumulative revenue generated over time.

```
• with cum_rev as (  
    select ord.order_date, sum(od.quantity * pz.price) as revenue  
    from order_details od  
    join pizzas pz on od.pizza_id = pz.pizza_id  
    join orders ord on ord.order_id = od.order_id  
    group by ord.order_date )  
select order_date, round(sum(revenue) over(order by order_date ),0) as cum_revenue  
from cum_rev;
```



	order_date	cum_revenue
▶	2015-01-01	2714
	2015-01-02	5446
	2015-01-03	8108
	2015-01-04	9864
	2015-01-05	11930
	2015-01-06	14358
	2015-01-07	16561
	2015-01-08	19399
	2015-01-09	21526
	2015-01-10	23990
	2015-01-11	25863
	2015-01-12	27782
	2015-01-13	29831
	2015-01-14	32359
	2015-01-15	34344
	2015-01-16	36938
	2015-01-17	39002
	2015-01-18	40979
	2015-01-19	43366
	2015-01-20	45764

Insight : Cumulative revenue generated over time as shown above report



Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```
WITH PizzaRevenue AS (  
    SELECT  
        pizza_types.category,  
        pizza_types.name,  
        SUM(order_details.quantity * pizzas.price) AS revenue  
    FROM pizza_types  
    JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
    JOIN order_details ON order_details.pizza_id = pizzas.pizza_id  
    GROUP BY pizza_types.category, pizza_types.name  
),  
RankedPizzaRevenue AS (  
    SELECT  
        category,  
        name,  
        revenue,  
        RANK() OVER (PARTITION BY category ORDER BY revenue DESC) AS rn  
    FROM PizzaRevenue  
    )SELECT name, revenue  
FROM RankedPizzaRevenue  
WHERE rn <= 3;
```

	name	revenue
▶	The Thai Chicken Pizza	43434
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41410
	The Classic Deluxe Pizza	38180
	The Hawaiian Pizza	32273
	The Pepperoni Pizza	30162
	The Spicy Italian Pizza	34831
	The Italian Supreme Pizza	33477
	The Sicilian Pizza	30940
	The Four Cheese Pizza	32266
	The Mexicana Pizza	26781
	The Five Cheese Pizza	26066

Insight : Report showing top 3 most ordered pizza based on revenue for each pizza category .



Thank You.. !

