



# PIZZA HUT

## S A L E S   A N A L Y S I S

*Specialist in Italian Food*





PS:

"How can Pizza Hut optimize its sales strategies by analyzing historical sales data to identify key trends, customer preferences, and potential areas for growth, thereby increasing market share and improving profitability?"



PIZZA HUT

S A L E S   A N A L Y S I S

# TECH STACKS:

- Advanced SQL
- Excel
- Power BI
- Python





# DATASETS

pizza_id	pizza_type	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
ckn_pesto_m	ckn_pesto	M	16.75
ckn_pesto_l	ckn_pesto	L	20.75
southw_ckn_s	southw_ckn	S	12.75
southw_ckn_m	southw_ckn	M	16.75
southw_ckn_l	southw_ckn	L	20.75

PIZZAS

pizza_type_id	name	category	ingredients
bbq_ckn	The Barbecue Chicken	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, Tomatoes, Red Onions, Jalapeno Peppers, Fontina Cheese
cali_ckn	The California Chicken	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno Peppers, Fontina Cheese
ckn_alfredo	The Chicken Alfredo	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms, Asiago Cheese
ckn_pesto	The Chicken Pesto	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garlic, Pesto Sauce
southw_ckn	The Southwest Chicken	Chicken	Chicken, Tomatoes, Red Peppers, Red Onions, Jalapeno Peppers, Green Peppers
thai_ckn	The Thai Chicken	Chicken	Chicken, Pineapple, Tomatoes, Red Peppers, Thai Sweet Chilli, Kaffir Lime Leaves
big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sausage
classic_dlx	The Classic Deluxe	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon
hawaiian	The Hawaiian Pizza	Classic	Sliced Ham, Pineapple, Mozzarella Cheese
ital_cpcollo	The Italian Capo	Classic	Capocollo, Red Peppers, Tomatoes, Goat Cheese, Garlic, Oregano, Basil
napolitana	The Napolitana	Classic	Tomatoes, Anchovies, Green Olives, Red Onions, Garlic
pep_msh_pep	The Pepperoni	Classic	Pepperoni, Mushrooms, Green Peppers
pepperoni	The Pepperoni	Classic	Mozzarella Cheese, Pepperoni
the_greek	The Greek Pizza	Classic	Kalamata Olives, Feta Cheese, Tomatoes, Garlic, Beef Chuck Ribs, Red Onions, Oregano, Basil
brie_carre	The Brie Carre	Pi Supreme	Brie Carre Cheese, Prosciutto, Caramelized Onions, Pears, Thyme, Honey, Red Onions, Basil
calabrese	The Calabrese	Pi Supreme	'Nduja Salami, Pancetta, Tomatoes, Red Onions, Friggitello Peppers, Basil, Oregano, Red Onions, Tomato Paste
ital_supr	The Italian Supreme	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Green Olives, Basil, Oregano, Red Onions, Tomato Paste
peppr_salami	The Pepper Salami	Supreme	Genoa Salami, Capocollo, Pepperoni, Tomatoes, Asiago Cheese, Basil, Oregano, Red Onions, Tomato Paste

PIZZA\_TYPES

order_details_id	order_id	pizza_id	quantity
1	1	hawaiian_m	1
2	2	classic_dlx_m	1
3	2	five_cheese_l	1
4	2	ital_supr_l	1
5	2	mexicana_m	1
6	2	thai_ckn_l	1
7	3	ital_supr_m	1
8	3	prsc_argla_l	1
9	4	ital_supr_m	1
10	5	ital_supr_m	1
11	6	bbq_ckn_s	1
12	6	the_greek_s	1
13	7	spinach_supr_s	1
14	8	spinach_supr_s	1
15	9	classic_dlx_s	1

ORDER\_DETAILS



- Retrieve the total number of orders placed.

```
-- Retrieve the total number of orders placed.
```

```
Select count(order_id) as total_orders from orders;
```

	total_orders
▶	21350

- Calculate the total revenue generated from pizza sales.

```
Select
```

```
round(sum(order_details.quantity * pizzas.price),2) as Total_Revenue_Generated  
from order_details join pizzas  
on pizzas.pizza_id = order_details.pizza_id;
```

Total_Revenue_Generated
817860.05

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

```
Select pizza_types.name, sum(order_details.quantity) as quantity  
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.name  
order by quantity DESC  
limit 5;
```

size	count(order_details.order_details_id)
M	15385
L	18526
S	14137
XL	544
XXL	28



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SALES ANALYSIS

- Determine the distribution of orders by hour of the day.

```
Select hour(order_time) as hour, count(order_id) from orders  
group by hour(order_time);
```

	hour	count(order_id)
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468



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

```
select pizza_types.name , round(sum(order_details.quantity * pizzas.price),5) as revenue  
from pizza_types join pizzas on pizzas.pizza_type_id = pizza_types.pizza_type_id  
join order_details  
on order_details.pizza_id = pizzas.pizza_id  
group by pizza_types.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.

```
select order_date, sum(revenue) over(order by order_date) as cum_revenue
from
(select orders.order_date,
sum(order_details.quantity * pizzas.price) as revenue
from order_details join pizzas
on order_details.pizza_id=pizzas.pizza_id
join orders on orders.order_id = order_details.order_id
group by orders.order_date) as sales;
```



order_date	cum_revenue
2015-01-01	2713.8500000000004
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
2015-01-09	21526.4
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.500000000001



# PIZZA HUT

SALES ANALYSIS

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

```
select name, revenue from
(select category, name, revenue, rank() over (partition by category order by revenue desc)
from
(select pizza_types.category, pizza_types.name, sum((order_details.quantity)* pizzas.price)
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) as a) as b
where rn<=3;
```

	name	revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5
	The Classic Deluxe Pizza	38180.5
	The Hawaiian Pizza	32273.25
	The Pepperoni Pizza	30161.75
	The Spicy Italian Pizza	34831.25
	The Italian Supreme Pizza	33476.75
	The Sicilian Pizza	30940.5
	The Four Cheese Pizza	32265.70000000065
	The Mexicana Pizza	26780.75
	The Five Cheese Pizza	26066.5





# CONCLUSION:

Our analysis of Pizza Hut's sales data uncovered key insights into customer preferences, peak sales periods, and underperforming products. These findings can guide Pizza Hut in refining its strategies, optimizing offerings, and improving operations, leading to increased sales, enhanced customer satisfaction, and stronger market performance.



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SALES ANALYSIS

THANK YOU

