PIZZA SALE ANALYSIS

PIZZA HUT SALES ANALYSIS

(ITS A FRACHISE OF PIZZA HUT)

About Pizza Hut:

Pizza Hut, a globally recognized pizza chain, is known for its wide range of pizzas and Italian-American cuisine. With thousands of outlets worldwide, it combines traditional pizza-making with modern innovation to cater to diverse customer preferences.
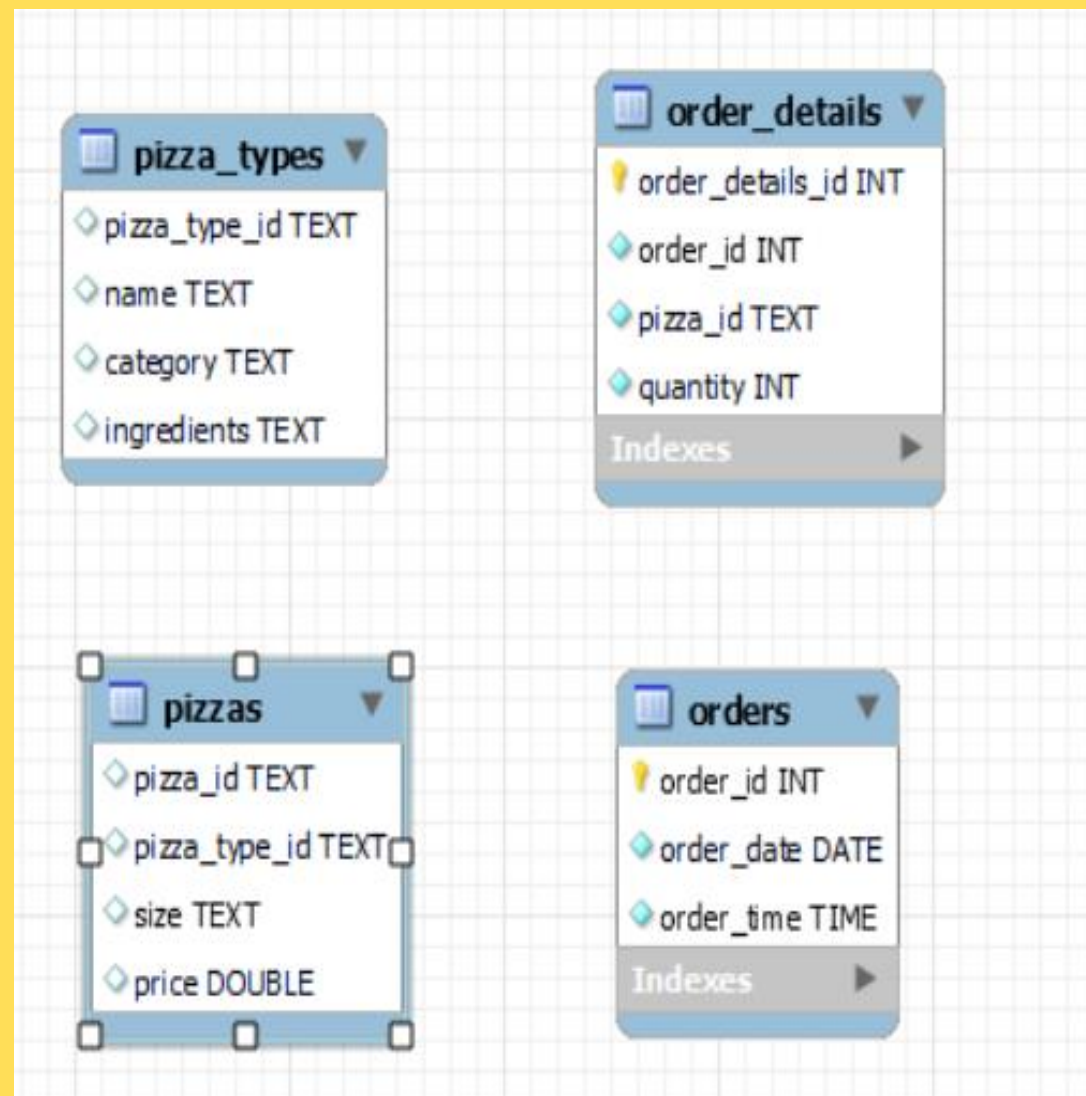
This analysis delves into Pizza Hut's sales using various parameters such as pizza size, category, top-selling pizzas based on revenue, daily sales, most ordered pizzas, and percentage contribution of each pizza to the overall sales. The insights derived aim to guide strategic planning for increased profitability

Tool used:Excel,SQL

Pizza Sales Database

pizza_types
- pizza_type_id TEXT
- name TEXT
- category TEXT
- ingredients TEXT

order_details
- order_details_id INT
- order_id INT
- pizza_id TEXT
- quantity INT
- Indexes

pizzas
- pizza_id TEXT
- pizza_type_id TEXT
- size TEXT
- price DOUBLE

orders
- order_id INT
- order_date DATE
- order_time TIME
- Indexes

PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```sql
with cte as (select pt.category,
sum(od.quantity*p.price) as revenue
from pizza_types pt join pizzas p
on pt.pizza_type_id=p.pizza_type_id join
order_details od on
od.pizza_id=p.pizza_id
group by pt.category),
cte_1 as(select sum(revenue) as total_sum from cte)
select cte.category,round(cte.revenue/cte_1.total_sum*100,2)
as revenue_pct from cte,cte_1 order by revenue_pct desc;
```

category	revenue_pct
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```sql
select pt.name,sum(od.quantity*p.price) as revenue
from pizza_types pt join pizzas p
on pt.pizza_type_id=p.pizza_type_id join
order_details 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

CUMULATIVE REVENUE GENERATED OVER TIME

```sql
with cte as (select o.order_date,
round(sum(od.quantity*p.price),2) as revenue
from pizzas p join
order_details od on
od.pizza_id=p.pizza_id join
 orders o on o.order_id=od.order_id
 group by o.order_date)
 select *,round(sum(revenue)
 over(order by order_date),2) as cumulative_revenue from cte
 order by order_date ;
```

order_date	revenue	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
2015-01-05	2065.95	11929.55
2015-01-06	2428.95	14358.5
2015-01-07	2202.2	16560.7

HIGHEST-PRICED PIZZA

```sql
SELECT pt.name,p.price from pizza_types
pt join pizzas p
on pt.pizza_type_id=p.pizza_type_id
where p.price=(select max(price) from pizzas);
```

name	price
The Greek Pizza	35.95

TOP 5 MOST ORDERED PIZZA ALONG WITH QUANTITIES

```sql
select pt.name,count(quantity) as quantity
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 pt.name
order by quantity desc
limit 5;
```

name	quantity
The Classic Deluxe Pizza	2416
The Barbecue Chicken Pizza	2372
The Hawaiian Pizza	2370
The Pepperoni Pizza	2369
The Thai Chicken Pizza	2315

AVERAGE NUMBER OF PIZZAS ORDERED PER DAY

```sql
select round(avg(quantity),0) as Avg_Order_everyday
from (SELECT sum(od.quantity)
as quantity,o.order_date
FROM order_details od join orders o on
od.order_id=o.order_id
group by o.order_date)as total_order;
```

Avg_Order_everyday
138

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

```sql
with cte as (select pt.category,pt.name,
round(sum(od.quantity*p.price),2)  as revenue
from pizza_types pt join pizzas p
on pt.pizza_type_id=p.pizza_type_id join
order_details od on
od.pizza_id=p.pizza_id
group by pt.category,pt.name),
cte_2 as (select category,name,revenue,
dense_rank() over(partition by category order by revenue desc )
as Top_3_pizza
from cte)
select * from cte_2 where Top_3_pizza<=3;
```

category	name	revenue	Top_3_pizza
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

TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED

```sql
SELECT pt.category,sum(od.quantity) as quantity
FROM pizza_types pt join pizzas p on
pt.pizza_type_id=p.pizza_type_id join
order_details od on od.pizza_id=p.pizza_id
group by pt.category;
```

category	quantity
Classic	14888
Veggie	11649
Supreme	11987
Chicken	11050

MOST COMMON PIZZA SIZE ORDERED.

```sql
SELECT p.size,count(od.order_details_id)
as total_order
from pizzas p join order_details od
on p.pizza_id=od.pizza_id
group by p.size
order by total_order desc
limit 1;
```

size	total_order
L	18526

KEY FINDINGS

- Most Popular Category: The Classic category leads with 26.91% of the total revenue.
- Pizzas with chicken as an ingredient have generated the highest total revenue, amounting to ₹1,27,611.75.
- Highest Priced Pizza: "The Greek Pizza" is the most expensive item on the menu.
- Top 5 Ordered Pizzas:
1. The Classic Deluxe Pizza
2. The Barbeque Pizza
3. The Hawaiian Pizza
4. The Pepperoni Pizza
5. The Thai Chicken PizzA
- Average Daily Orders: The average number of orders per day is 138.

KEY FINDINGS

- Top 3 Revenue-Generating Categories:

1. Chicken
2. Classic
3. Supreme

- Total Quantity Sold by Category:

1. Classic: 14,888
2. Veggie: 11,649
3. Supreme: 11,987
4. Chicken: 11,050

AREAS OF IMPROVEMENT

- **Menu Optimization**: Focus on promoting and expanding the Classic and Chicken categories, as they are top revenue generators.
- **Pricing Strategy**: Reassess the pricing of "The Greek Pizza" to ensure it aligns with customer expectations and market demand.
- **Inventory Management**: Monitor the supply and demand of the most ordered pizzas to reduce waste and improve efficiency.
- **Customer Preferences**: Conduct surveys or gather feedback to understand why certain pizzas are more popular and use this data to innovate new offerings.
- **Marketing Efforts**: Increase marketing efforts for the Classic and Chicken pizzas to capitalize on their popularity and boost sales further.