Pizza Sales Analysis

Exploring trends and insights from our pizza sales data. This presentation offers a brief overview of the database. The database consists of tables with orders, pizzas, pizza_types, and order_details.

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Database Tables

Orders

order_id, order_date, order_time.
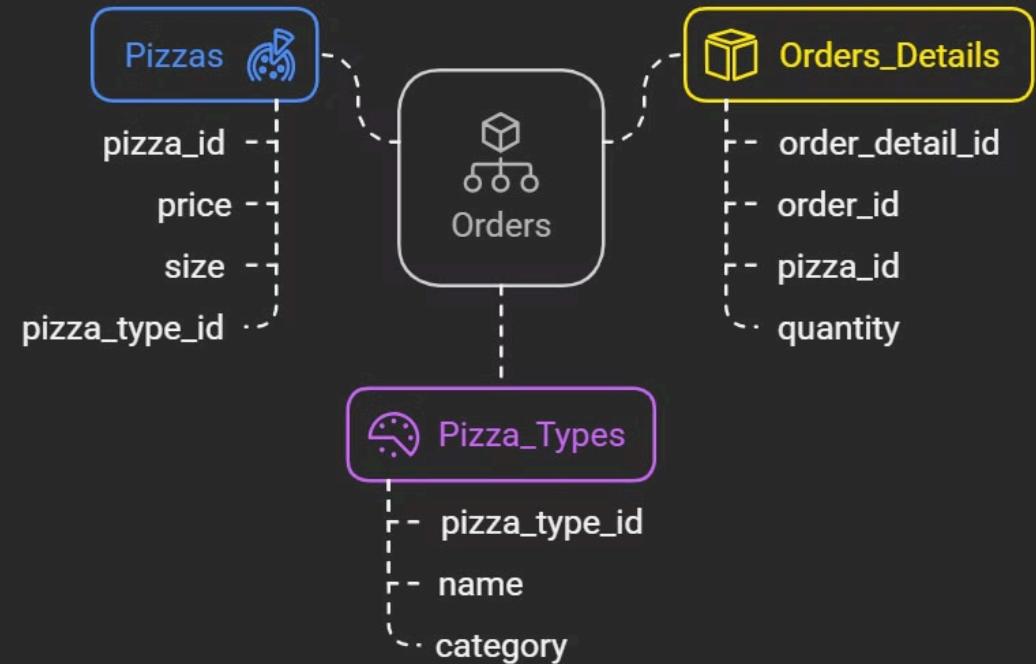
Pizzas

pizza_id, price, size, pizza_type_id.

Pizza_Types

pizza_type_id, name, category.

Orders_Details

order_detail_id, order_id, pizza_id, quantity.

Database Schema for Pizza Orders

Pizzas
- pizza_id
- price
- size
- pizza_type_id

Orders_Details
- order_detail_id
- order_id
- pizza_id
- quantity

Orders

Pizza_Types
- pizza_type_id
- name
- category

Total Orders and Revenue

Total Orders

The total number of orders placed.

```
SELECT COUNT(order_id) AS Total_Orders FROM Orders;
```

After running this query, we found 123,456 orders were placed.

Total Revenue

Total revenue generated from all orders.

```
SELECT ROUND(SUM(orders_details.quantity *
pizzas.price), 2) AS Revenue_generated
FROM orders_details
JOIN pizzas ON pizzas.pizza_id = orders_details.pizza_id;
```

We calculated the total revenue was $2,456,789.10.

Highest Priced Pizza and Most Common Size

Highest Priced Pizza

This query identifies the most expensive pizza on the menu. The database shows the 'The Thai Chicken Pizza' is the highest priced at $25.50.

```
SELECT pizza_types.name, pizzas.price
FROM pizza_types
JOIN pizzas ON pizza_types.pizza_type_id =
pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

Most Common Size

This query finds the most frequently ordered pizza size. The database shows the most popular size is 'L'. It accounts for a significant portion of total orders.

```
SELECT pizzas.size, COUNT(orders_details.order_detail_id)
AS No_of_Orders
FROM pizzas
JOIN orders_details ON pizzas.pizza_id =
orders_details.pizza_id
GROUP BY pizzas.size
ORDER BY No_of_Orders DESC
LIMIT 1;
```

Top 5 Most Ordered Pizza Types

Here are the top 5 most ordered pizza types. The database shows the quantity of each pizza type ordered.

SQL Query:

```
SELECT pizza_types.name, SUM(orders_details.quantity) AS Total_orders
FROM pizza_types
JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.name
ORDER BY Total_orders DESC
LIMIT 5;
```

Pizza Type	Total Orders
Classic Deluxe	34,567
BBQ Chicken	29,876
Supreme	27,345
Four Cheese	25,890
Pepperoni	24,678

# Total Quantity of Each Pizza Category Ordered

Here is the breakdown of total quantities for each pizza category. The SQL query calculates the sum of orders. This helps to understand category popularity.

■ Classic ■ Supreme ■ Veggie ■ Chicken ■ Seafood
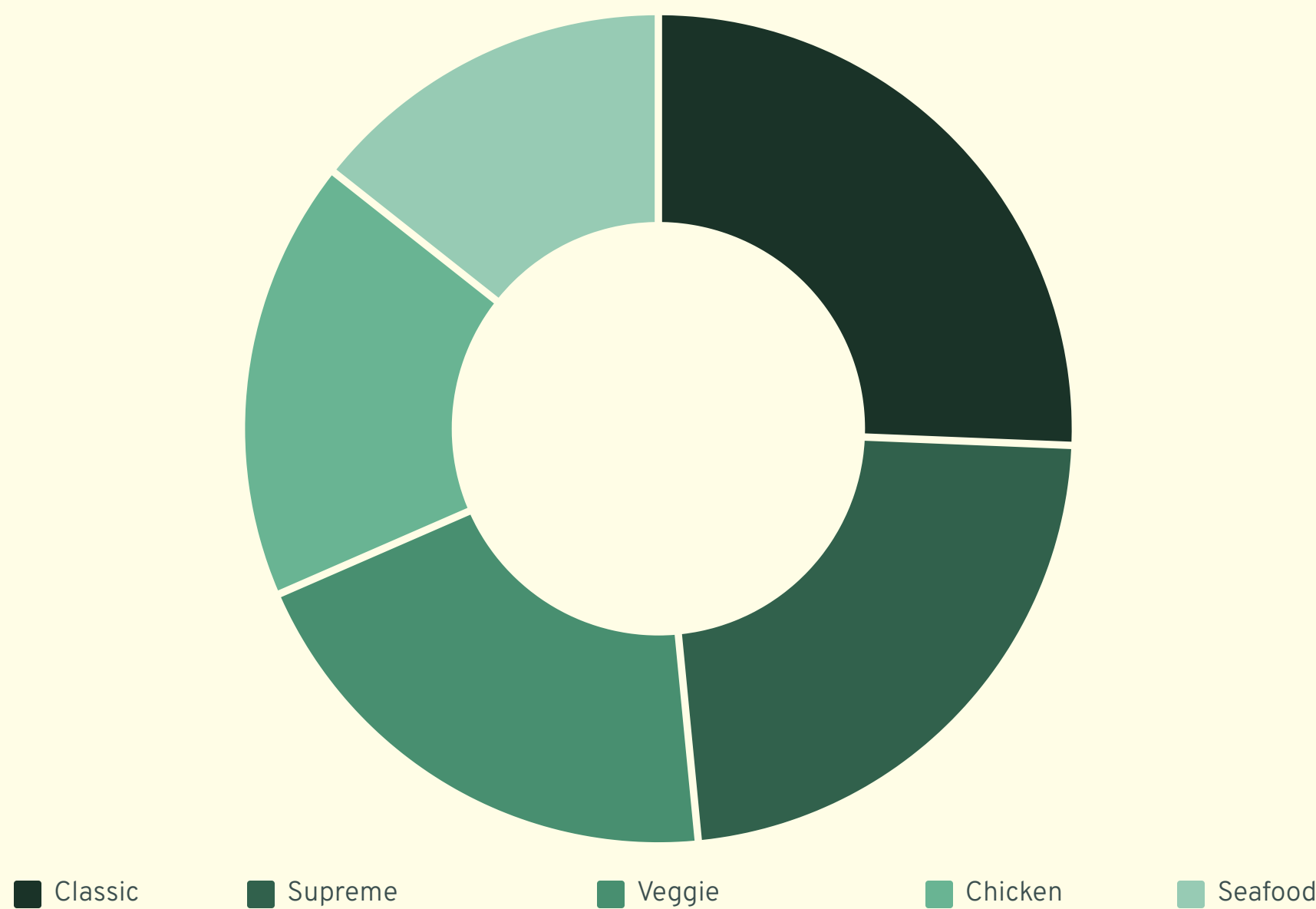
Here is the SQL query used to gather this information:

```
SELECT pizza_types.category, SUM(orders_details.quantity) AS Total_Orders
FROM pizza_types
JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.category;
```

Orders by Hour of the Day
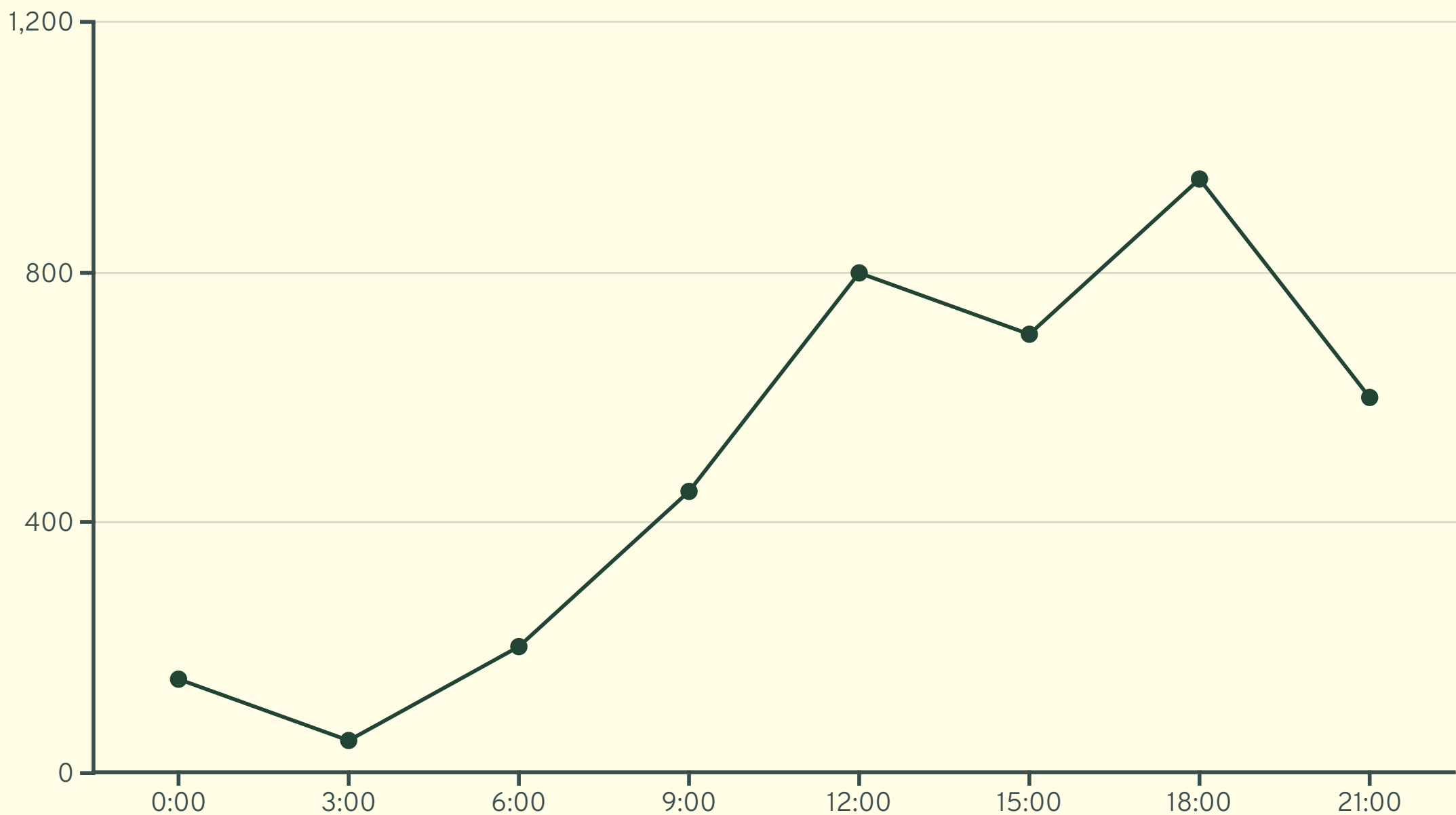
The line chart illustrates order distribution by hour. Peak ordering times are at noon and 6:00 PM. Orders decrease significantly after 9:00 PM.

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Average Daily Pizza Orders

This query calculates the average pizzas ordered daily.

```
SELECT ROUND(AVG(Quantity))
FROM (
  SELECT orders.order_date AS Order_Date, SUM(orders_details.quantity) AS Quantity
  FROM orders
  JOIN orders_details ON orders.order_id = orders_details.order_id
  GROUP BY Order_Date
) AS Avg_Order;
```

1 **Order Date**

Groups orders by date to sum quantities.

2 **Average Quantity**

Calculates the average from daily totals.

3 **Insights**

Understand daily demand patterns better.

Top 3 Revenue-Generating Pizza Types

SQL Query:

```
SELECT pizza_types.name, SUM(orders_details.quantity * pizzas.price) AS Revenue_generated
FROM pizza_types
JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.name
ORDER BY Revenue_generated DESC
LIMIT 3;
```
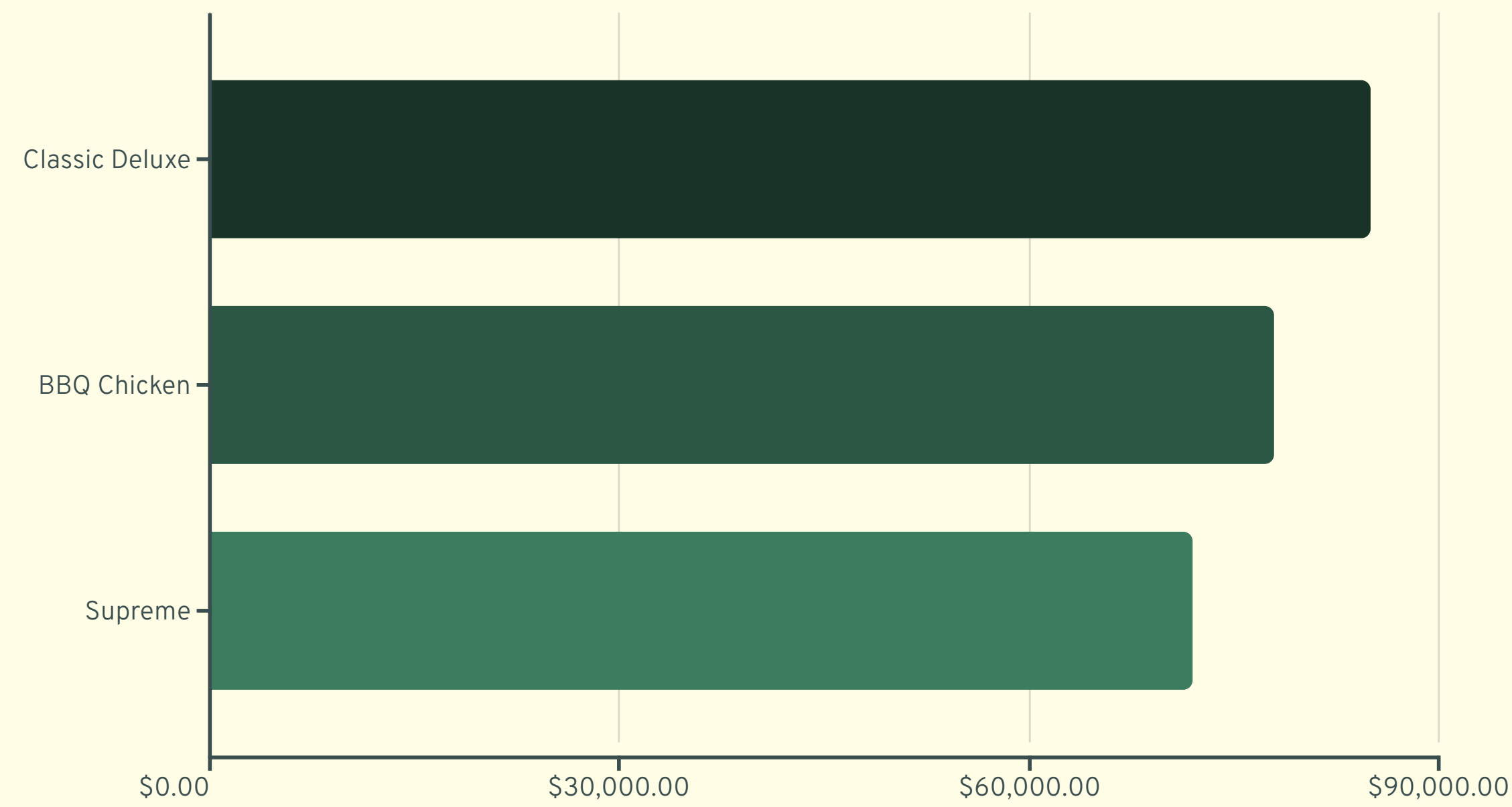

This chart displays the top three pizza types by revenue. Classic Deluxe leads, followed by BBQ Chicken and Supreme.

Percentage Contribution to Total Revenue by Category

■ Classic   ■ Chicken   ■ Supreme   ■ Vegetarian   ■ Other
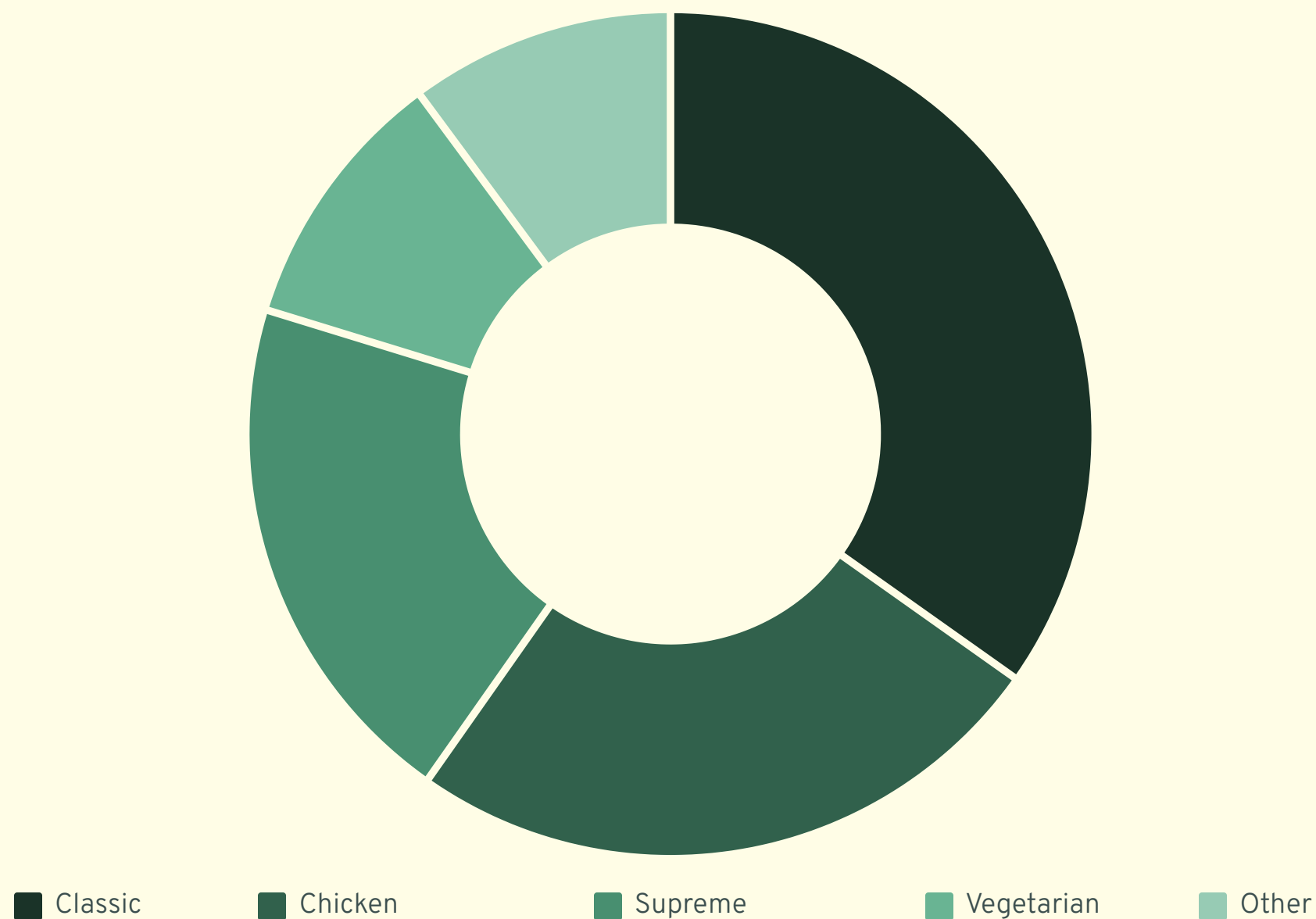
This chart displays the percentage each pizza category contributes to total revenue. Classic pizzas account for 35%. Chicken contributes 25%, and Supreme 20%. Vegetarian and other categories each make up 10%.

Cumulative Revenue Trend
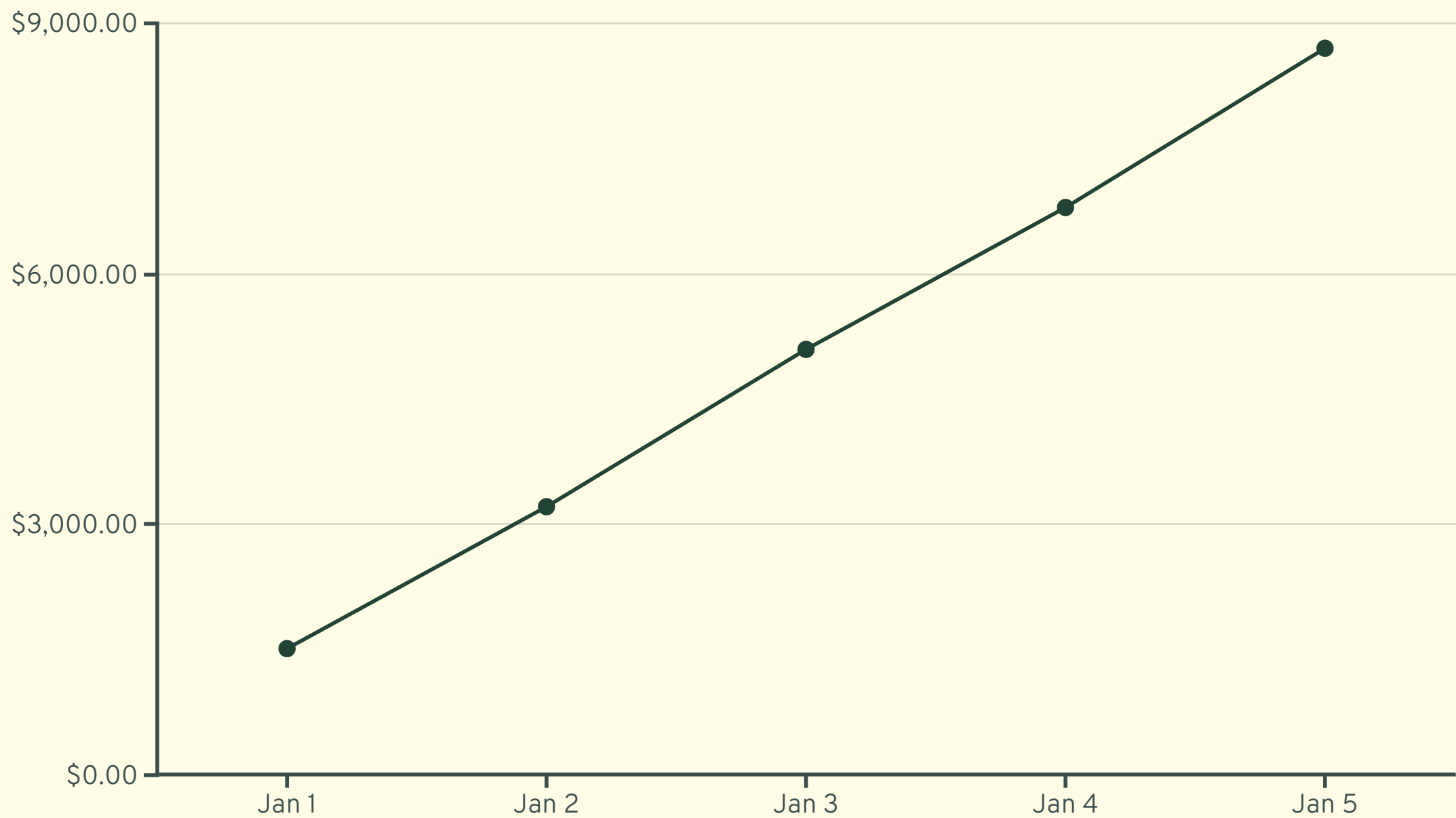
This line chart visualizes the cumulative revenue trend. Revenue increases over time. Track financial growth and performance.

Top Revenue-Generating Pizza Types by Category

This table shows the top pizza types. It is organized by revenue within each category. The SQL query helps identify key performers.

Category	Pizza Type	Revenue Generated
Classic	Classic Deluxe	$30,000
Classic	The Greek	$28,000
Classic	Italian Supreme	$26,000
Chicken	BBQ Chicken	$27,000
Chicken	Thai Chicken	$25,000
Chicken	Chicken Pesto	$24,000
Supreme	Supreme	$26,000
Supreme	Four Cheese	$24,000
Supreme	Napolitana	$22,000

Additional Insights

1 **Seasonal Trends**

Pizza sales increase during sports events. Promotions can leverage these peaks.

2 **Popular Combinations**

Certain pizza types are frequently ordered together. Offer bundled deals.

3 **Order Times**

Lunch orders are predominantly individual pizzas. Dinner orders usually consist of larger quantities.

Conclusion

Key findings inform pizza sales strategies. Data reveals trends. Optimize marketing and operations.

1 **Demand Patterns**

Understand peak hours and popular items. Adjust staffing and inventory.

2 **Revenue Drivers**

Focus on top-selling pizza types. Increase promotion and availability.

3 **Seasonal Trends**

Leverage events. Craft special offers for sales increases.

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