

Pizza Sales Data Analysis

This analysis examines pizza sales data to uncover trends, identify customer preferences, and highlight opportunities for growth. By exploring various aspects of the data, we aim to gain valuable insights and support informed decision-making.

M by **Mohamad Gamal**



Introduction and Objectives

This analysis aims to provide a comprehensive understanding of pizza sales data. By examining various aspects of the data, such as sales by category, size, and quarter, we can gain valuable insights into customer preferences, product performance, and overall business performance.

1 Understand customer preferences

Identify popular pizza categories, toppings, and sizes to tailor marketing and product offerings.

2 Analyze sales trends

Identify seasonal variations, peak sales periods, and growth areas to optimize inventory and resource allocation.

3 Evaluate operational efficiency

Identify ranges of times for improvement in order fulfillment, delivery times, and customer service to enhance the overall customer experience.



Sales Trends by Product Category

Analyzing sales trends by product category allows us to understand customer preferences and identify popular pizza types.

Classic Pizzas

These traditional pizzas are consistently popular, representing a stable base of sales. chart

Specialty Pizzas

These unique and innovative pizzas often drive growth and cater to adventurous palates.

Vegetarian Pizzas

The popularity of vegetarian options reflects a growing demand for plant-based choices and dietary preferences.

category

Select all

Chicken

Classic

Supreme

Veggie



Order

48.62K



AVG sales per order

\$16.8



Total Sales

\$817.9K

Quarter, Month

Select all

Qtr 1

Qtr 2

Qtr 3

Qtr 4

Total Sales by category

Classic

Supreme

Chicken

Veggie

\$220.1K

\$208.2K

\$195.9K

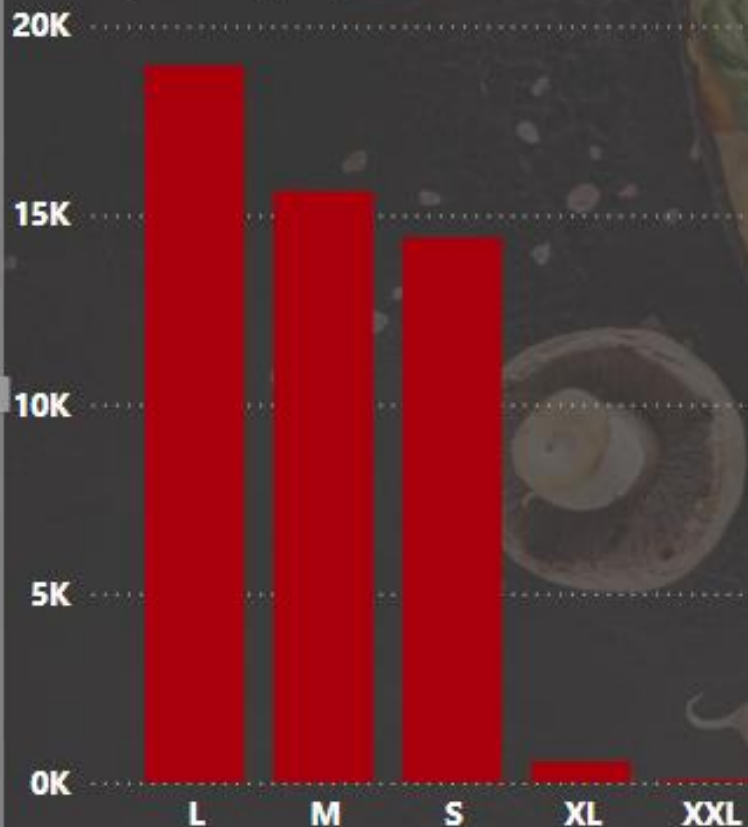
\$193.7K



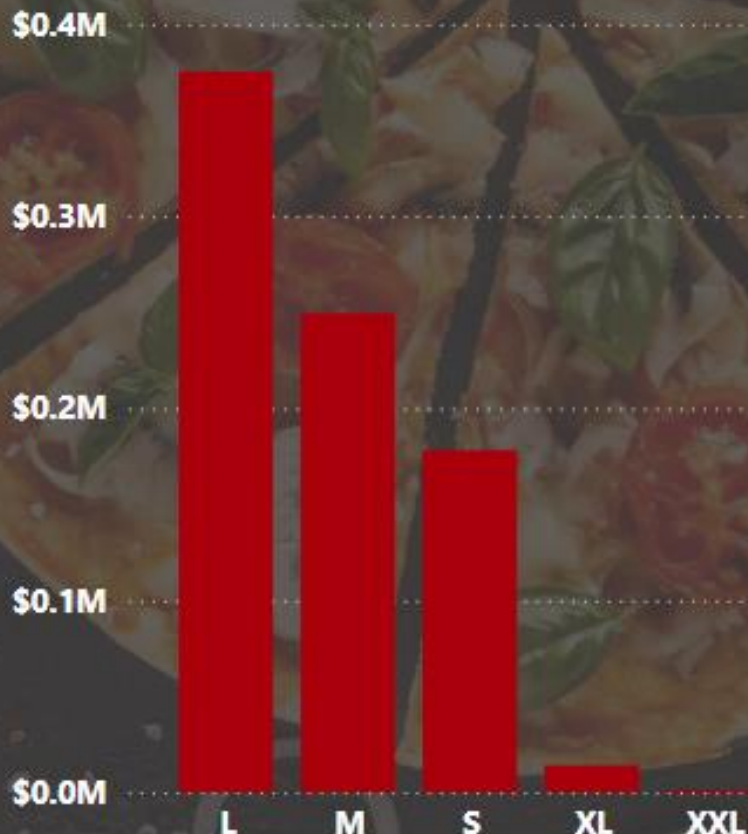
AVG Quantity per order

1.00

sum quantity by size



Total Sales by size



category	name	Total Sales
Veggie	The Vegetables + Vegetables Pizza	\$24,374.8
Chicken	The Thai Chicken Pizza	\$43,434.3
Supreme	The Spinach Supreme Pizza	\$15,277.8
Veggie	The Spinach Pesto Pizza	\$15,596.0
Veggie	The Spinach and Feta Pizza	\$23,271.3
Supreme	The Spicy Italian Pizza	\$34,831.3
Chicken	The Southwest Chicken Pizza	\$34,705.8
Supreme	The Soppresata Pizza	\$16,425.8
Supreme	The Sicilian Pizza	\$30,940.5
Supreme	The Prosciutto and Arugula Pizza	\$24,193.3
Classic	The Pepperoni, Mushroom, and Peppers Pizza	\$18,834.5
Classic	The Pepperoni Pizza	\$30,161.8
Supreme	The Pepper Salami Pizza	\$25,529.0
Classic	The Napolitana Pizza	\$24,087.0
Total		\$817,860.1



Understanding average sales per order and order size and total value of sales provides insights into customer purchase patterns and potential for upselling.

Overall Sales Performance

- **Total Sales:** The total sales amount to **\$817,913.43**, indicating the restaurant's overall revenue.
- **Average Sales per Order:** The average sales per order are **\$16.8**, providing insight into the typical purchase amount of customers.
- **Order Volume:** A total of **48,620** orders have been placed, showing the restaurant's customer activity.

Sales by Category

- **Category Performance:** The "Total Sales by Category" chart shows that Classic pizzas have the highest sales, followed by Supreme and Chicken pizzas. Veggie pizzas have the lowest sales.
- **Category Popularity:** This analysis reveals customer preferences and can inform inventory management and marketing efforts.

Sales by Quarter and Month

- **Seasonal Trends:** The "Total Sales by Category" chart allows for analyzing sales trends by quarter and month. This can help identify seasonal fluctuations and peak sales periods.
- **Quarterly Performance:** Qtr 1 and Qtr 2 appear to have higher sales compared to Qtr 3 and Qtr 4, suggesting potential seasonal factors influencing sales.

Sales by Size

- **Size Popularity:** The "Total Sales by Size" chart shows that Medium (M) pizzas have the highest sales, followed by Large (L) and Small (S) sizes. Extra-Large (XL) and Extra-Extra-Large (XXL) sizes have lower sales.
- **Size Preferences:** This analysis indicates customer preferences for pizza sizes and can inform product offerings and pricing.

Product-Level Analysis

- **Top-Selling Pizzas:** The dashboard provides information on the top-selling pizzas by name and total sales. This allows for identifying popular products and understanding customer preferences.
- **Product Profitability:** Analyzing the sales and cost of each pizza can help assess product profitability and identify opportunities for improvement.



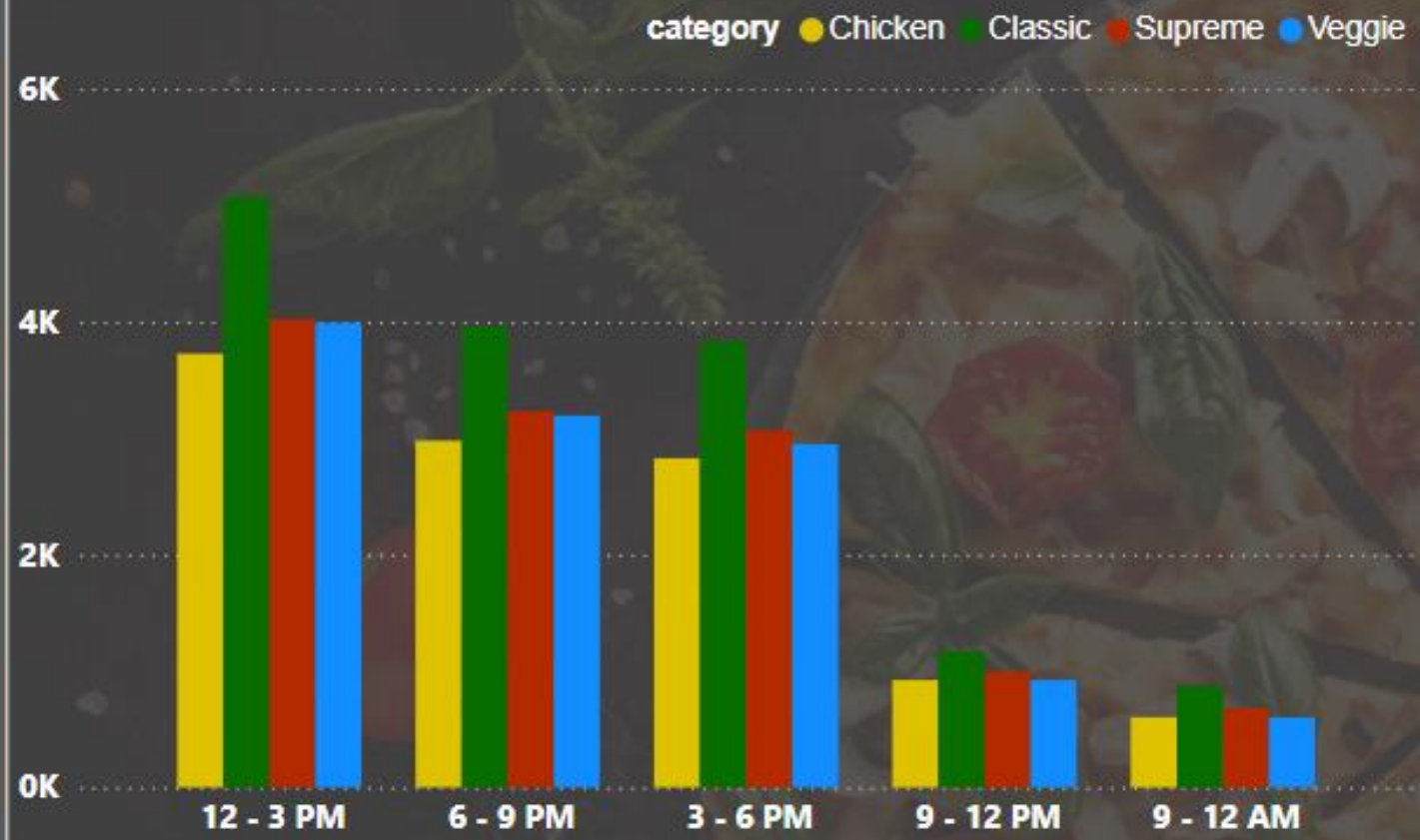
Understanding average sales per order and order size and total value of sales provides insights into customer purchase patterns and potential for upselling.

Recommendations for Further Analysis:

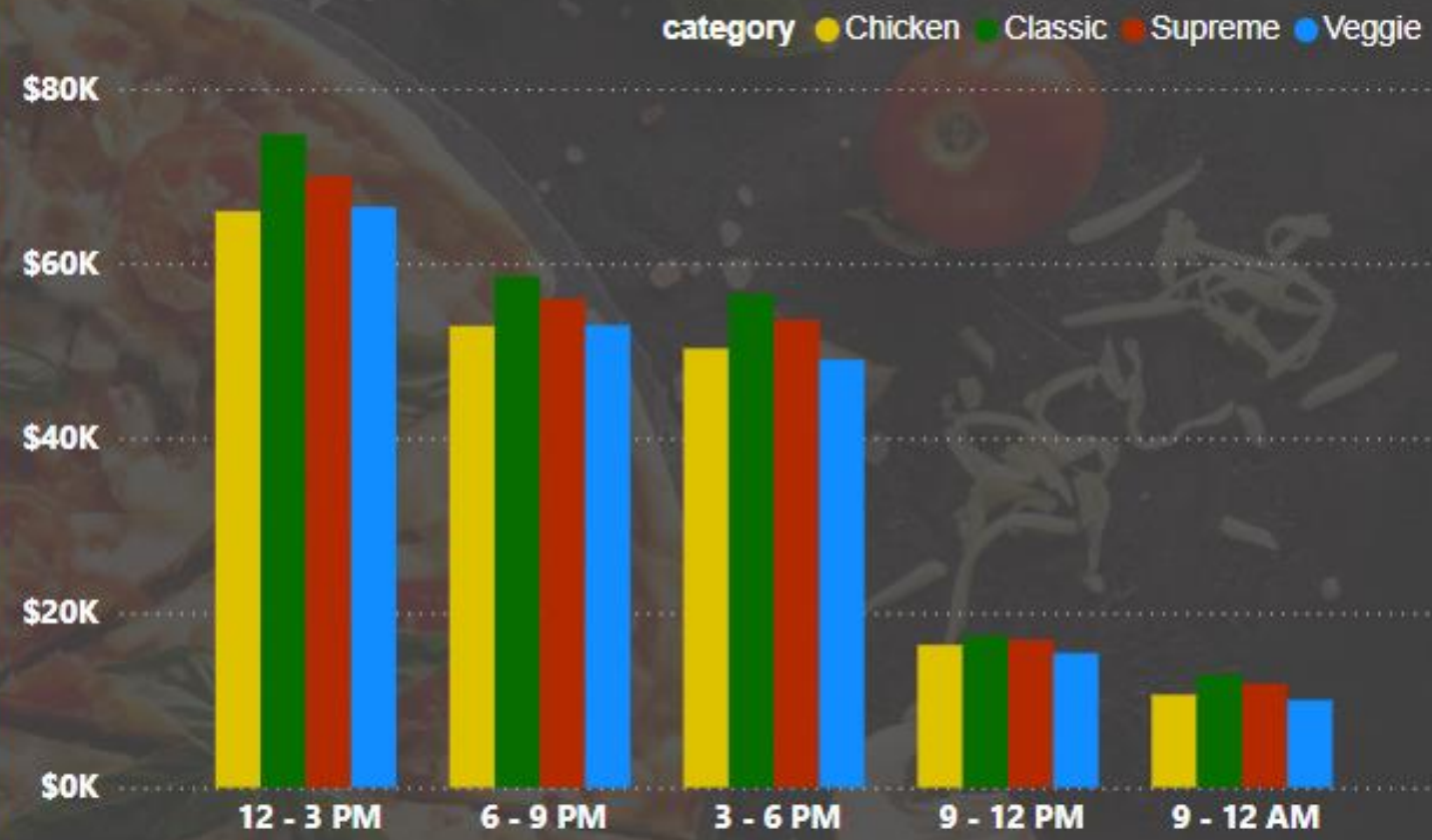
- **Customer Segmentation:** Segment customers based on demographics, purchase history, or other criteria to identify specific customer segments with different preferences and needs.
- **Product Bundling:** Explore opportunities to bundle popular pizzas or sides to increase average order values.
- **Marketing Campaigns:** Analyze the impact of marketing campaigns on sales and customer behavior to optimize marketing efforts.
- **Inventory Management:** Use sales data to optimize inventory levels and prevent stockouts or excess inventory.
- **Pricing Strategy:** Evaluate the pricing strategy for different pizza sizes and categories to ensure profitability and competitiveness.

By conducting a comprehensive analysis of sales data, pizza restaurants can gain valuable insights into their customer preferences, product performance, and operational efficiency. This information can be used to make data-driven decisions to improve sales, profitability, and customer satisfaction.

Sum of quantity by Hour Range and category

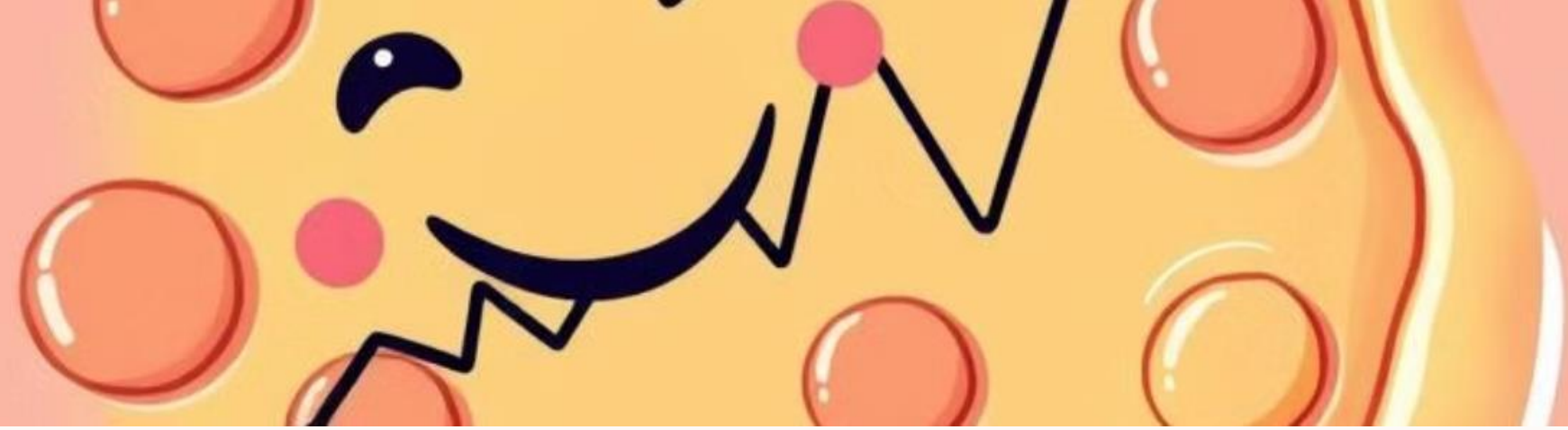


Total Sales by Hour Range and category



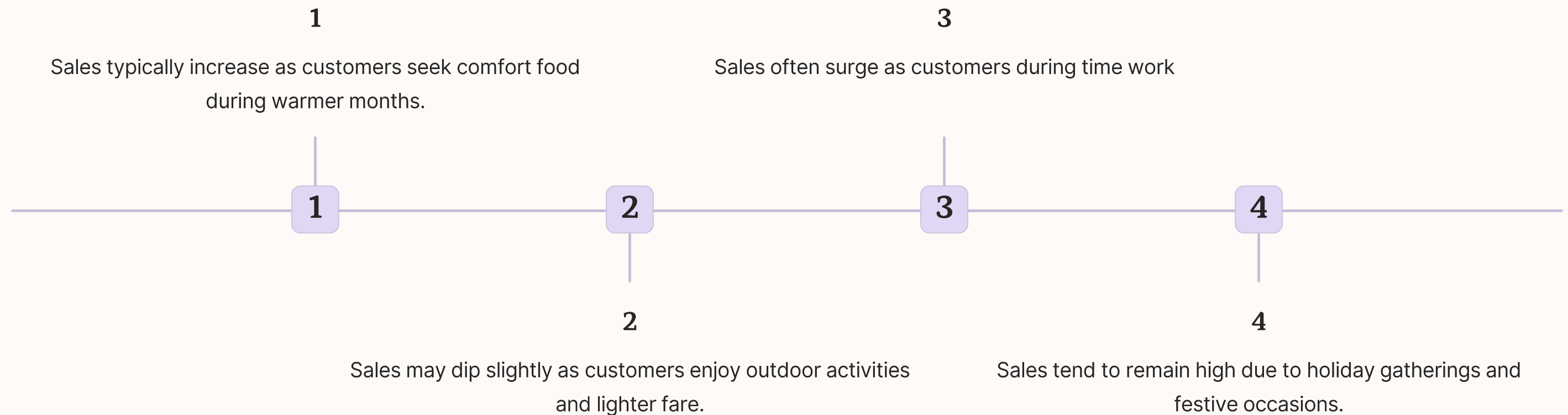
Total Sales by Month





Sales Performance

Tracking sales performance reveals seasonal trends and identifies peak sales periods.



Hourly Sales Performance

- **Peak Sales Hours:** The "Sum of Quantity by Hour Range and Category" chart shows that the busiest hours are between **6 PM** and **9 PM**, followed by **3 PM** to **6 PM**. This indicates peak dining times for the restaurant.
- **Category Performance by Hour:** The same chart reveals that Classic pizzas consistently have the highest sales across all hour ranges, followed by Supreme and Chicken pizzas. Veggie pizzas have lower sales throughout the day.
- **Hourly Sales Trends:** The "Total Sales by Hour Range and Category" chart provides a breakdown of sales by hour range and category. It shows that sales generally increase from **12-3 PM** to **6-9 PM**, with a slight dip between **9 PM** and **12 AM**.

Monthly Sales Trends

- **Seasonal Patterns:** The "Total Sales by Month" chart indicates that sales are generally higher during the summer months (**June, July, and August**) and lower during the winter months (**December, January, and February**).
- **Peak Sales Months:** July and August appear to be the peak sales months, while December and January have the lowest sales.

Category Performance

- **Category Popularity:** Classic pizzas consistently have the highest sales across all hour ranges and months, suggesting that they are the most popular category among customers.
- **Category-Specific Trends:** Analyzing sales by category and hour range can help identify specific products or times of day that are driving sales for each category.

Sum of quantity by Quarter and Month



category	ingredients	Sum of quantity	Total Sales
Veggie	Tomatoes, Red Peppers, Jalapeno Peppers, Red Onions, Cilantro, Corn, Chipotle Sauce, Garlic	1484	\$26,780.8
Classic	Tomatoes, Anchovies, Green Olives, Red Onions, Garlic	1464	\$24,087.0
Supreme	Spinach, Red Onions, Pepperoni, Tomatoes, Artichokes, Kalamata Olives, Garlic, Asiago Cheese	950	\$15,277.8
Veggie	Spinach, Mushrooms, Tomatoes, Green Olives, Feta Cheese	997	\$13,955.8
Veggie	Spinach, Mushrooms, Red Onions, Feta Cheese, Garlic	1446	\$23,271.3
Veggie	Spinach, Artichokes, Tomatoes, Sun-dried Tomatoes, Garlic, Pesto Sauce	970	\$15,596.0
Veggie	Spinach, Artichokes, Kalamata Olives, Sun-dried Tomatoes, Feta Cheese, Plum Tomatoes, Red Onions	934	\$15,360.5
Supreme	Soppressata Salami, Fontina Cheese, Mozzarella Cheese, Mushrooms, Garlic	961	\$16,425.8
Classic	Sliced Ham, Pineapple, Mozzarella Cheese	2422	\$32,273.3
Veggie	Ricotta Cheese, Gorgonzola Piccante Cheese, Mozzarella Cheese, Parmigiano Reggiano Cheese, Garlic	1902	\$32,265.7
Supreme	Prosciutto di San Daniele, Arugula, Mozzarella Cheese	1457	\$24,193.3
Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon	2453	\$38,180.5
Classic	Pepperoni, Mushrooms, Green Peppers	1250	\$18,824.5
Total		49574	\$817,860.1

Quarterly Sales Performance

- **Peak Sales Quarters:** Qtr 1 (January, February, and March) and Qtr 3 (July, August, and September) appear to be the peak sales quarters, with higher overall quantities sold compared to Qtr 2 and Qtr 4.
- **Seasonal Patterns:** The chart suggests that sales may be influenced by seasonal factors, such as warmer weather in Qtr 1 and Qtr 3, which could lead to increased outdoor dining and demand for pizza.

Monthly Sales Trends

- **Month-by-Month Analysis:** The chart provides a detailed breakdown of sales by month, allowing for a granular analysis of sales patterns.
- **Peak Sales Months:** March and April seem to be the months with the highest sales, while December and January have the lowest sales.

Category Performance by Quarter and Month

- **Category Popularity:** While the overall chart shows a general trend in sales by quarter and month, analyzing sales by category can provide more specific insights into the performance of each pizza type.
- **Seasonal Preferences:** Certain pizza categories might be more popular during specific seasons or months. For example, lighter, veggie-based pizzas might be more popular in warmer months, while heartier classic pizzas might be preferred in colder months.

Product-Level Analysis

- **Top-Selling Pizzas:** The dashboard provides information on the top-selling pizzas by name and total sales. This allows for identifying popular products and understanding customer preferences.
- **Product Profitability:** Analyzing the sales and cost of each pizza can help assess product profitability and identify opportunities for improvement.





Conclusion

This analysis provides a comprehensive overview of pizza sales data, revealing valuable insights into customer preferences, product performance, and operational efficiency.