

# Pizza Sales Analysis Report

Microsoft Power BI

Nehal Ansari  
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Guided By: Data Tutorials

YouTube link: <https://www.youtube.com/watch?v=V-s8c6jMRN0&list=PLzgQH5zz4JIWCtFBIXIIHVuIixJBZ9NzE&index=7>

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# Project Overview

The **Pizza Sales Analysis Report**, created in **Power BI**, provides actionable insights into pizza sales trends from **January to December 2015**. It highlights key metrics like total revenue, orders, and average order value through interactive visuals, including bar charts, pie charts, and line graphs.

This Project have two pages one is **Home Page** and another is Best/Worst Sellers Page. We will go through them one by one and analyse them.

The report identifies peak sales on weekends, particularly Fridays, with **July and January** being the busiest months. The **Classic category** and **large-sized pizzas** lead in sales performance.

Designed to support data-driven decisions, this dashboard helps businesses understand customer preferences, optimize inventory, and improve sales strategies, showcasing technical expertise in data analysis and visualization.

The report aims to analyze pizza sales data and derive actionable insights to enhance decision-making, identify customer preferences, and strategize for better sales performance.

**Special thanks** to 'Data Tutorials' Youtube Channel for this project explanation. I watched the video and learnt from it and tried to make the dashboard with same functionality by my own. Also changed some charts and changed the Report Theme.

# Data Model

The data is present in CSV file, I got the data from the tutor itself.

This is the historical pizza sales data ranging from Jan/2015 - Dec/2015.

The name of the data table is pizza\_sales.

Earlier data had only 12 columns present in the CSV file.

I added four more columns Day Name, Day Number, Month and Month Name to do some calculations.

These four columns were extracted from the existing column order\_date using Power Query editor.

Also created some Measures for KPIs and Aggregate calculations.

Day Name	←
Σ Day Number	←
Σ Month	←
Month Name	←
📅 order_date	
Σ order_id	
order_time	
pizza_category	
Σ pizza_id	
pizza_ingredients	
pizza_name	
pizza_name_id	
pizza_size	
Σ quantity	
Σ total_price	
Σ unit_price	

Collapse ^

# Data Cleaning

**Duplicates and Null Values:** Loaded data into Power Query Editor for data cleaning. Checked for null and duplicates values but didn't find any errors in the data.

**Transformed pizza\_size column:** In pizza\_size column there were data in shortest form like L, M, S, XL and XXL which doesn't make any sense. So, to give them more meaning I replaced the values. S to Small, M to Medium, L to Large, XL to X-Large, XXL to XX-Large.

**Added Column Day Name and Day Number:** We needed name of the day for the charts so added the column by extracting from the order\_date column. Also added column day number which will help us to sort the day name in an order.

**Added Column Month and Month Name:** Added two more columns Month and Month name by extracting them from order\_date column for the same purpose which I have mentioned in previous section.

**Created Measures:** Added 5 measures for KPIs: Avg Order Value, Avg Pizza Per Order, Total Orders, Total Pizza Sold and Total Revenue.

# Home Page

## Key Metrics(KPIs):

1. **Total Revenue:** \$817.86K.
2. **Average Order Value:** \$38.31.
3. **Total Pizzas Sold:** 49,574.
4. **Total Orders:** 21,350.
5. **Average Pizzas per Order:** 2.32.

817.86K

Total Revenue

38.31

Avg Order Value

49574

Total Pizza Sold

21350

Total Orders

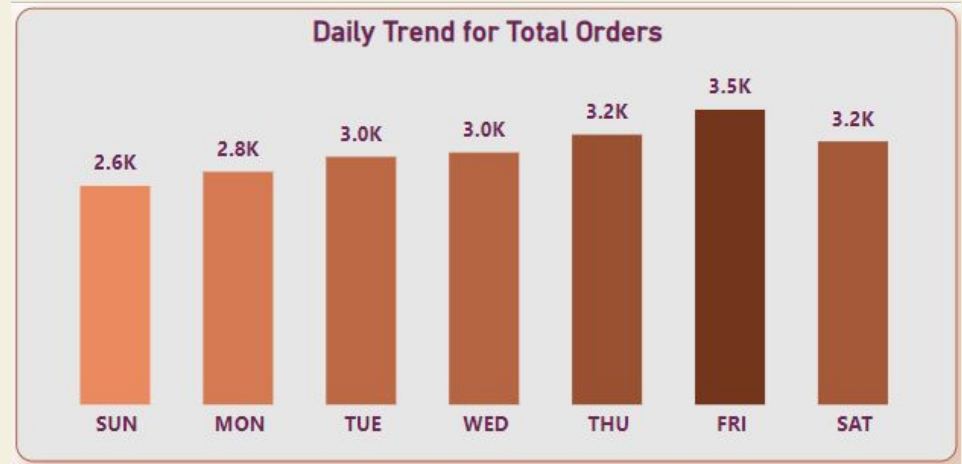
2.32

Avg Pizza Per Order

## Insights(Charts):

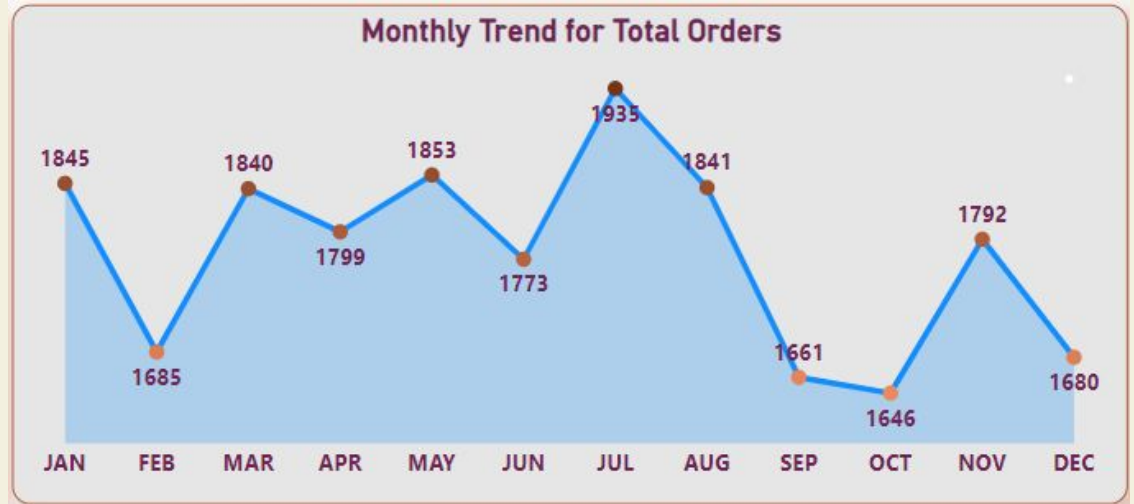
### Daily Trend for Total Orders:

- This bar chart illustrates order volume for each day of the week, highlighting that **Fridays** have the highest orders at 3.5K, followed by **Thursdays** and **Saturdays**.
- **Conditional gradient** formatting was applied to emphasize variations in daily performance visually. This enhances the readability of trends, showcasing Fridays as the most significant day for orders.



## Monthly Trend for Total Orders:

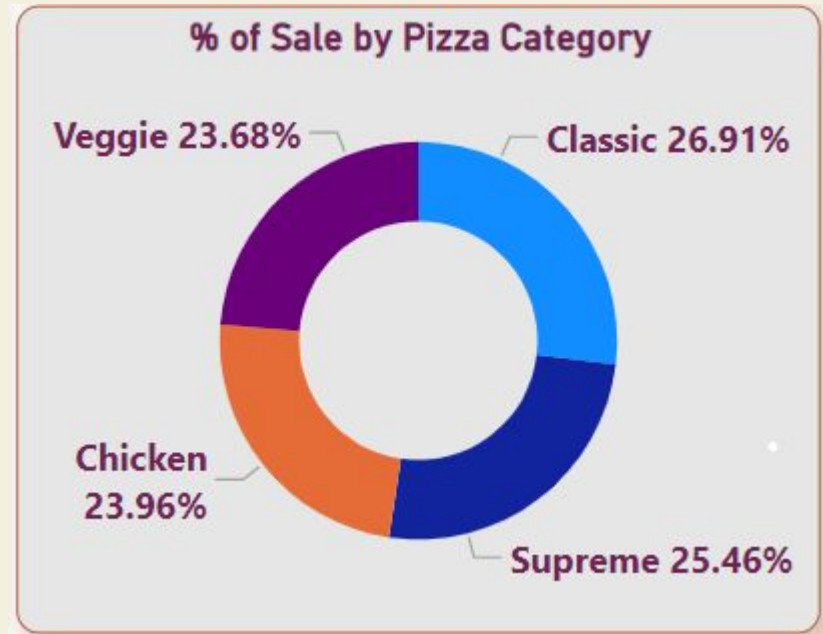
- A line graph reveals peak sales months as **July** (1,935 orders) and **January** (1,845 orders).
- This trend reflects seasonality in pizza consumption, offering actionable insights for planning marketing campaigns during peak months to maximize sales.





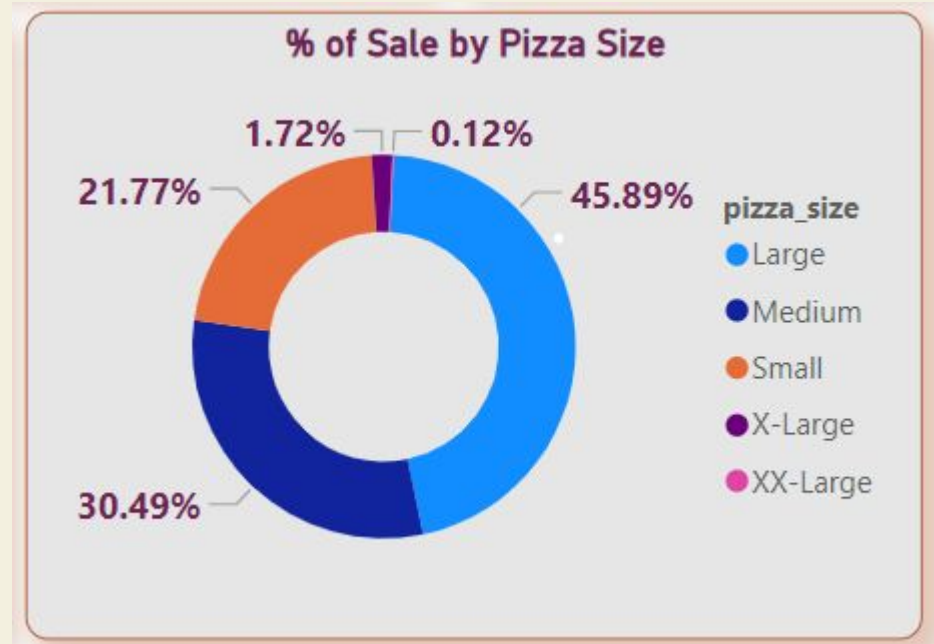
## Sales by Pizza Category:

- This pie chart shows the contribution of each pizza category:
  - **Classic** leads with 26.91% of total sales.
  - **Supreme** follows closely with 25.46%.
  - **Veggie** and **Chicken** contribute 23.68% and 23.96%, respectively.
- The **Classic category** was identified as the top-performing segment, driving maximum revenue and orders. This insight suggests focusing on promoting Classic pizzas further.



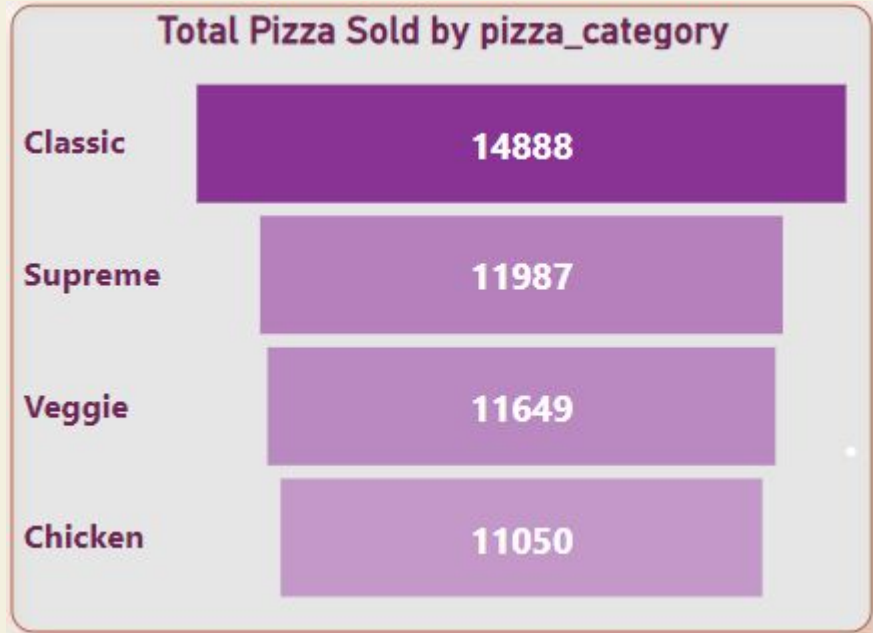
## Sales by Pizza Size:

- This pie chart highlights the size-wise breakdown:
  - **Large-sized pizzas** dominate with 45.89% of total sales.
  - Medium-sized pizzas account for 30.49%, followed by small sizes at 21.77%.
  - The remaining share is contributed by X-Large and XX-Large sizes.
- These insights underline the importance of maintaining adequate inventory for large pizzas, which are the most preferred by customers.



## Total Pizza Sold by Pizza Category:

- A bar chart compares the total number of pizzas sold for each category:
  - **Classic:** 14,888 pizzas.
  - **Supreme:** 11,987 pizzas.
  - **Veggie:** 11,649 pizzas.
  - **Chicken:** 11,050 pizzas.
- Conditional formatting was applied to highlight the differences between categories, making it easier to identify top contributors visually.



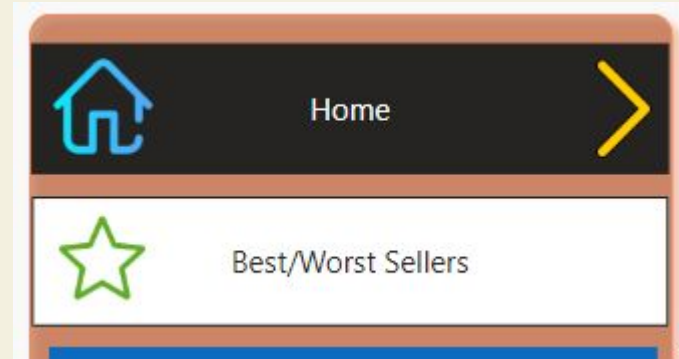
## Slicers:

- Interactive **slicers** are present on the right-hand side of the report, allowing users to filter data by specific dimensions such as time periods, pizza categories, and pizza sizes.
- These slicers provide flexibility and enable deeper exploration of the data to uncover tailored insights for business decisions.



# Navigation Buttons:

- The project consists of two pages:
  - **Home Page:** Overview of sales performance and key metrics.
  - **Best/Worst Sellers:** Detailed performance of individual pizzas and categories.
- Navigation buttons allow users to switch between these pages seamlessly, enhancing interactivity and user experience.

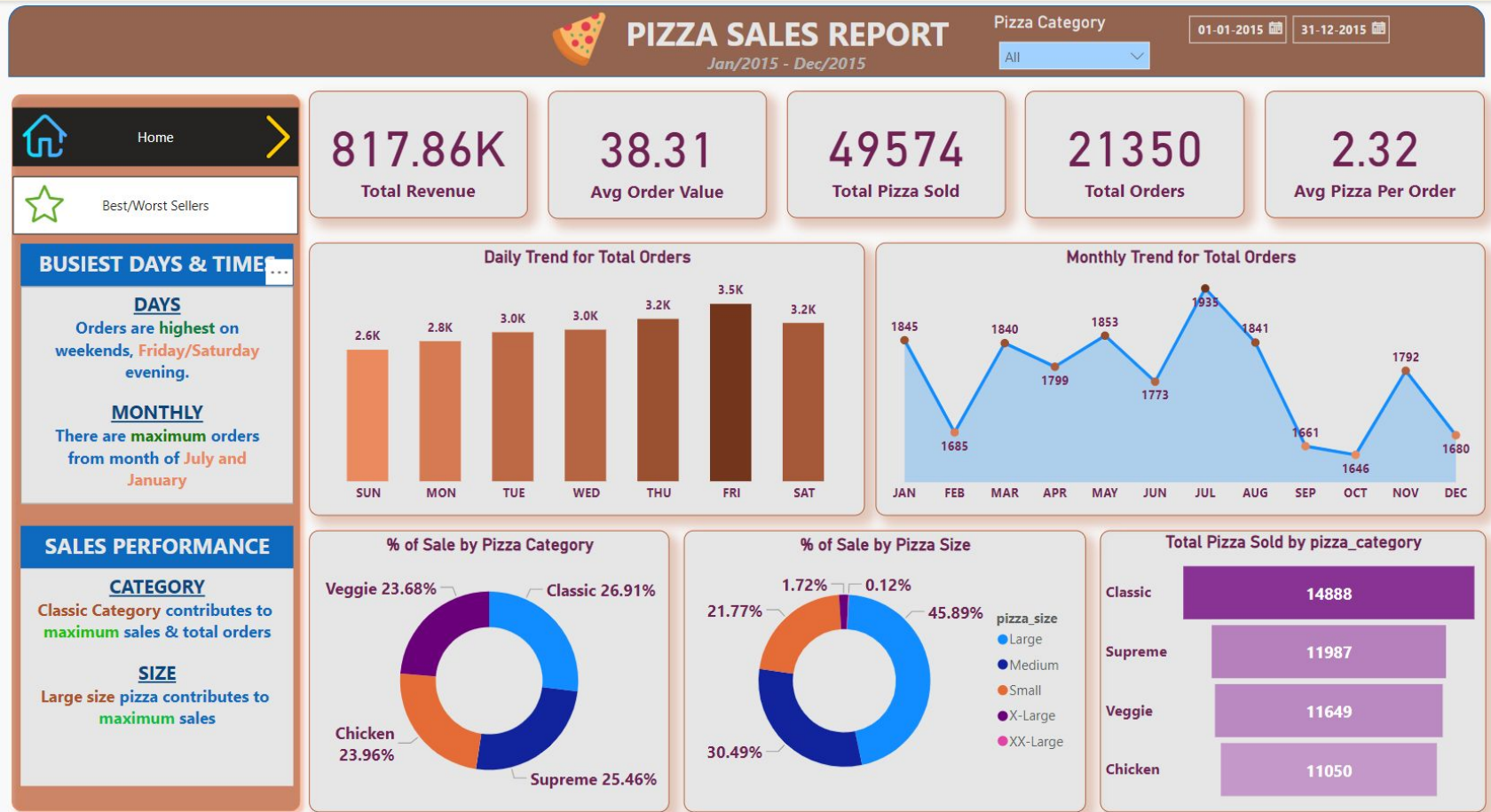


## Customized Theme:

A custom theme was designed for the report, featuring:

- A cohesive color palette reflecting the context of pizza sales.
- Professionally styled visuals for clarity and aesthetic appeal.
- Consistent fonts and layouts for a polished look.

# Home Page Report



# Best/Worst Sellers Page

## Insights(Charts):

### Top 5 Pizzas by Revenue:

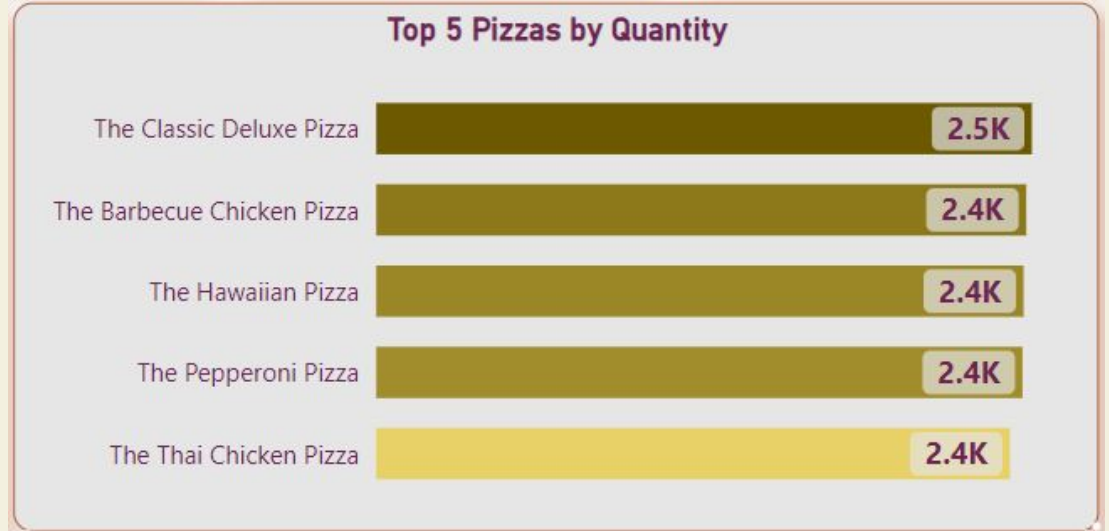
- **The Thai Chicken Pizza** and **The Barbecue Chicken Pizza** are the highest revenue contributors, each generating \$43K.
- **The California Chicken Pizza** follows with \$41K, while **The Classic Deluxe Pizza** and **The Spicy Italian Pizza** generate \$38K and \$35K respectively.
- These pizzas should be prioritized for promotions and marketing.





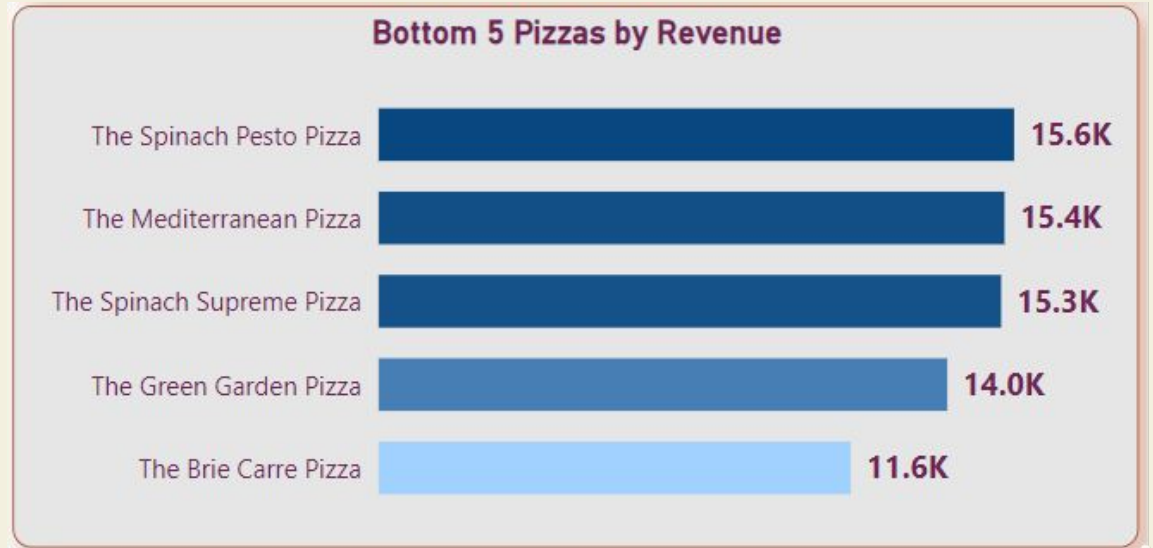
## Top 5 Pizzas by Quantity:

- **The Classic Deluxe Pizza** tops the list with 2.5K orders, followed closely by **The Barbecue Chicken Pizza** and **The Hawaiian Pizza**, each at 2.4K.
- **The Thai Chicken Pizza** and **The Pepperoni Pizza** also have 2.4K orders each.
- Ensuring the availability of these pizzas is essential for maintaining customer satisfaction.



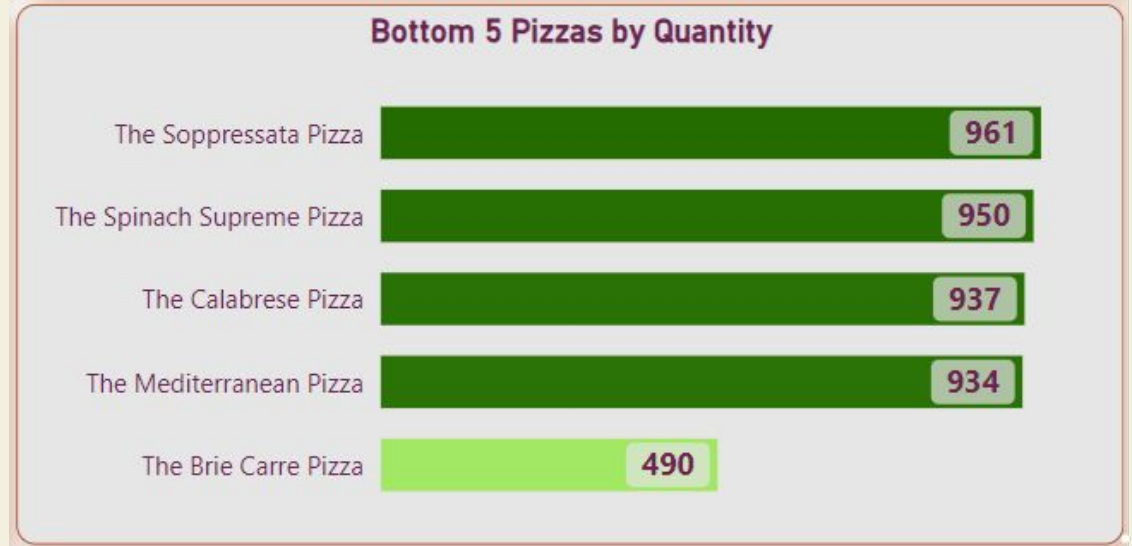
## Bottom 5 Pizzas by Revenue:

- **The Brie Carre Pizza** generates the least revenue at \$11.6K.
- Other low performers include **The Green Garden Pizza** (\$14K) and **The Mediterranean Pizza** (\$15.4K).
- These pizzas may require recipe improvements or targeted marketing strategies.



## Bottom 5 Pizzas by Quantity:

- The Brie Carre Pizza has the lowest sales volume at 490 units.
- The Mediterranean Pizza, The Calabrese Pizza, and The Soppressata Pizza also have significantly lower sales volumes.
- Reevaluating these pizzas could help boost overall performance.



# Best/Worst Sellers Report



## PIZZA SALES REPORT

Jan/2015 - Dec/2015

Pizza Category

All

01-01-2015

31-12-2015



Home



Best/Worst Sellers



### BEST SELLERS

#### REVENUE

Orders are **highest** on weekends, **Friday/Saturday** evening.

#### QUANTITY

There are **maximum** orders from month of **July** and **January**

### WORST SELLERS

#### REVENUE

The **Brie Carre** Pizza has **minimum** revenue

#### QUANTITY

The **Brie Carre** Pizza contributes to minimum Total Quantities

817.86K

Total Revenue

38.31

Avg Order Value

49574

Total Pizza Sold

21350

Total Orders

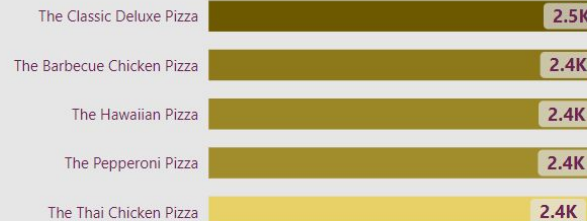
2.32

Avg Pizza Per Order

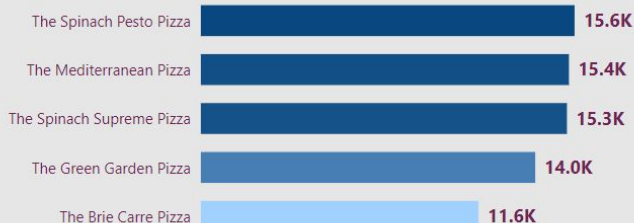
#### Top 5 Pizzas by Revenue



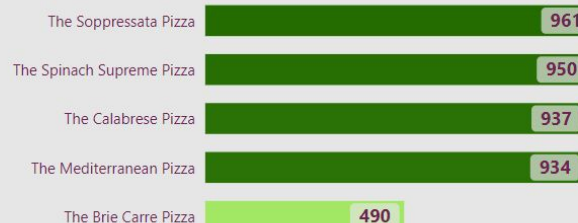
#### Top 5 Pizzas by Quantity



#### Bottom 5 Pizzas by Revenue



#### Bottom 5 Pizzas by Quantity



# Conclusion:

The **Pizza Sales Analysis Report** highlights the following key insights:

1. **Best Performers:**

- **Classic Deluxe Pizza, Barbecue Chicken Pizza, and Thai Chicken Pizza** are top performers in both revenue and quantity. Prioritizing these pizzas in marketing campaigns is essential.

2. **Worst Performers:**

- **The Brie Carre Pizza** has the lowest sales in both revenue and quantity. Consider removing it from the menu or enhancing its appeal.

3. **Peak Trends:**

- Focus marketing on weekends and during the months of **July** and **January** to leverage peak sales periods.

4. **Actionable Steps:**

- Optimize inventory for top-selling pizzas to ensure availability.
- Use targeted promotions for underperforming pizzas to boost their visibility.
- Regularly monitor sales trends and adjust strategies accordingly.

Thank You...