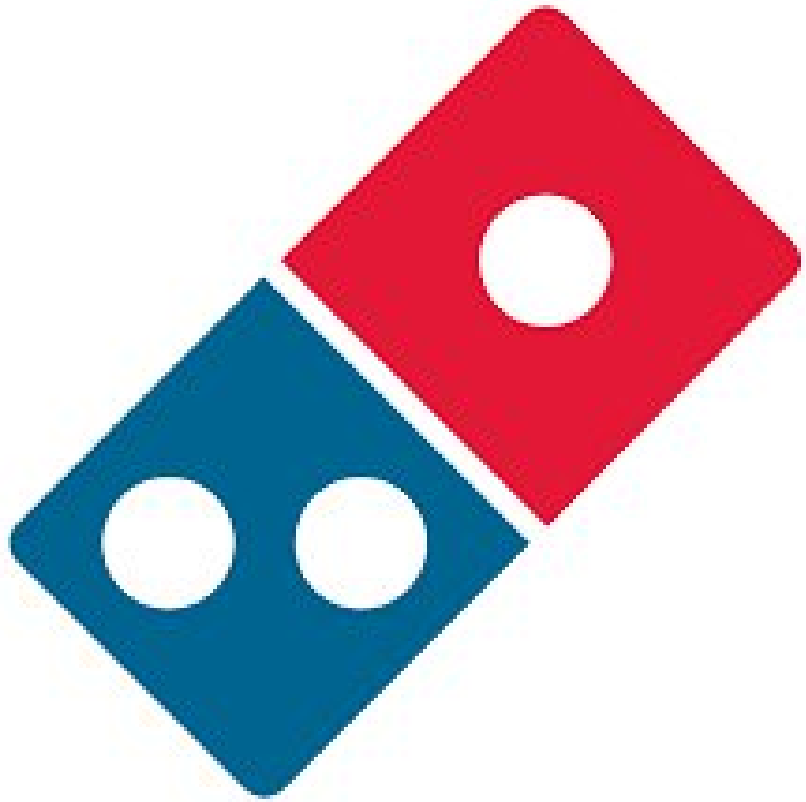
Domino’s Pizza Sales Analysis using SQL

Exploratory Data Analysis on Order, Revenue, and Product Performance



Tools: PostgreSQL | SQL

Purpose of the Analysis

•Domino’s operates in a high-volume, fast-moving food delivery business where **order patterns, product mix, and revenue drivers** directly impact operations and profitability.
•This analysis aims to understand **how orders and revenue are distributed across time, products, categories, and sizes** using historical sales data.

Business Questions Addressed

•How does order volume change over time?
•When do customers place orders during the day?
•Which pizzas, categories, and sizes drive most of the revenue?
•How concentrated is revenue across products?
•What does customer ordering behavior look like (order size, preferences)?

Primary Stakeholders

•Operations Team — staffing and inventory planning
•Finance Team — revenue monitoring and key drivers
•Product & Marketing Teams — menu performance and category focus

Outcome Expected

•Data-driven insights to support **better operational planning, product focus, and business understanding**, without making prescriptive decisions.

Dataset Source

•Publicly available Domino’s Pizza sales dataset
•Contains historical order-level transaction data

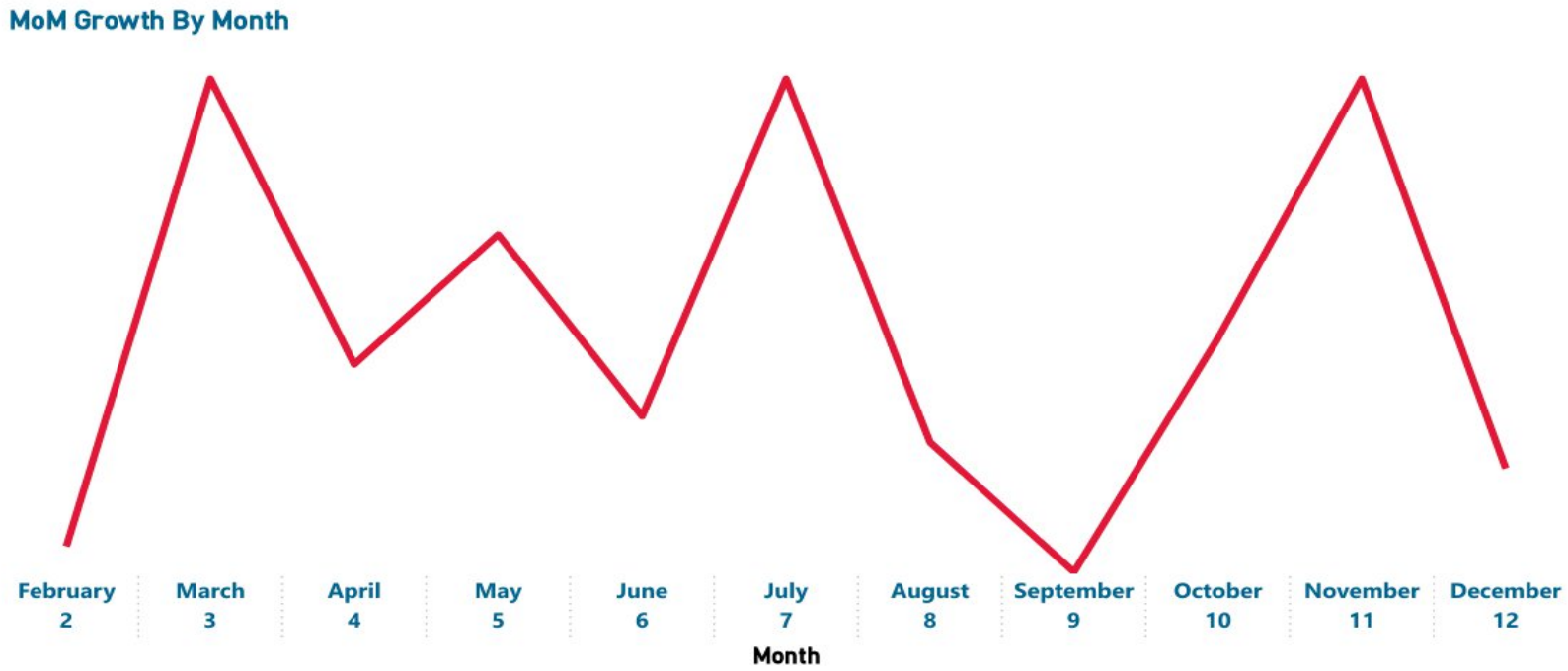
Time Period Covered

•Sales data spanning multiple months
•Used to analyse trends, seasonality, and customer behaviour over time

Tables Used

•**Orders** — order date, order time, customer reference
•**Order Details** — pizza-wise quantity per order
•**Pizzas** — pizza size and price information
•**Pizza Types** — pizza name and category (Classic, Veggie, Chicken, etc.)
•**Customers** — basic customer-level details

KPI 1: Order Volume Trend (MoM)



Key Insights

- Order volume shows **moderate fluctuations** across months.
- Demand remains **largely stable during mid-year**.
- A **sharp dip appears in September**, followed by recovery.
- Overall trend suggests **short-term disruptions, not sustained decline**.

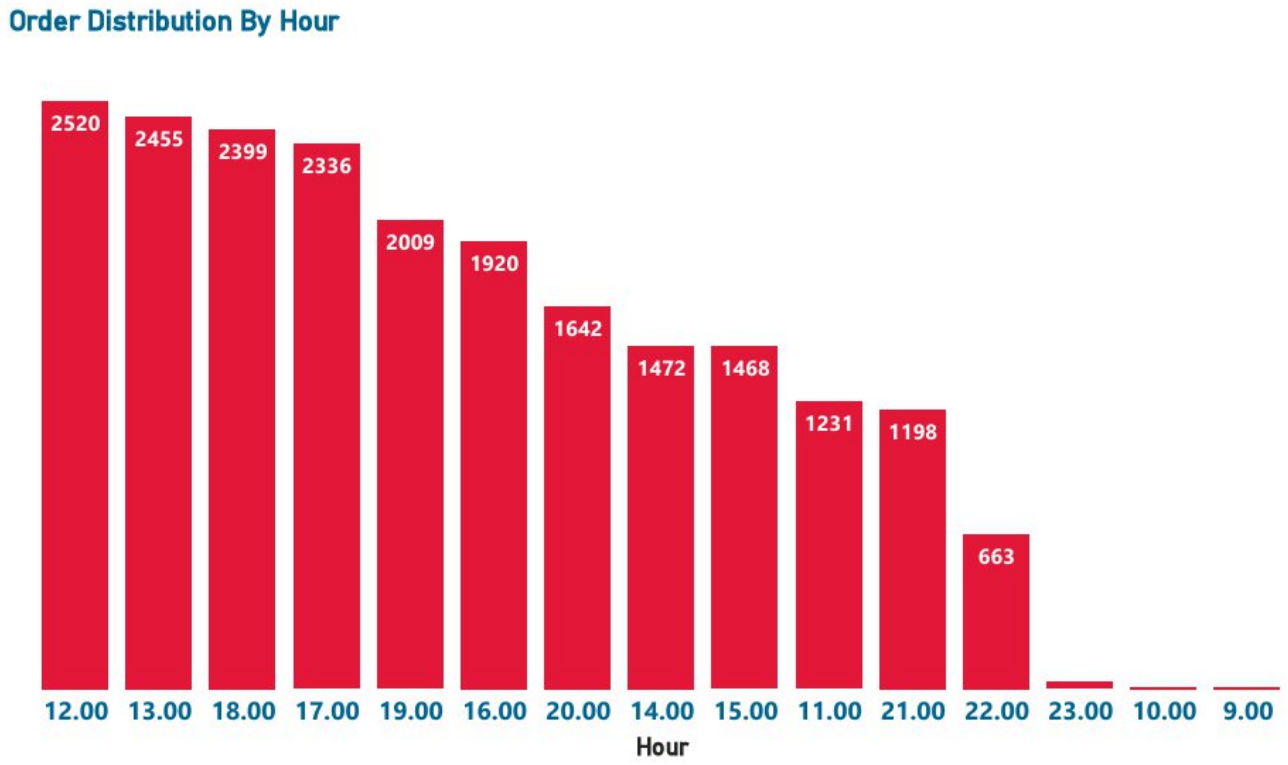
Notes

- Based on historical order counts only.
- External factors not included.

KPI 2: Orders by Hour of the Day

Key Insights

- Orders mainly occur between **11 AM and 9 PM**.
- The **12 PM–5 PM window** shows the highest and most consistent order volume.
- Order activity drops **significantly after 9 PM**.
- Early morning hours show **minimal demand**.



Notes

- Hourly distribution based on historical orders.
- Useful for understanding peak operational hours.

KPI 3: Total Revenue Generated

Key Insights

- Total revenue provides a **baseline measure** of overall business scale.
- Serves as a reference point to compare **future performance**.
- Helps contextualize revenue-driven KPIs in the analysis.

Notes

- Revenue calculated as *price × quantity*.
- Used as a supporting metric, not a trend indicator.

KPI 4: Top Pizzas by Revenue

Key Insights

- A small set of pizzas contributes **disproportionately high revenue**.
- The top revenue-generating pizzas are **chicken-based**, indicating strong performance of this segment.
- These items act as **key revenue drivers** within the menu.

Notes

- Revenue calculated using *price × quantity*.
- Category-level preference requires deeper analysis beyond this KPI.

KPI 5: Revenue Contribution per Pizza (%)

Key Insights

- Revenue is **concentrated among a small group of pizzas**.
- Top pizzas each contribute a **meaningful share** to total revenue.
- Contribution gradually declines across the remaining menu items.

Notes

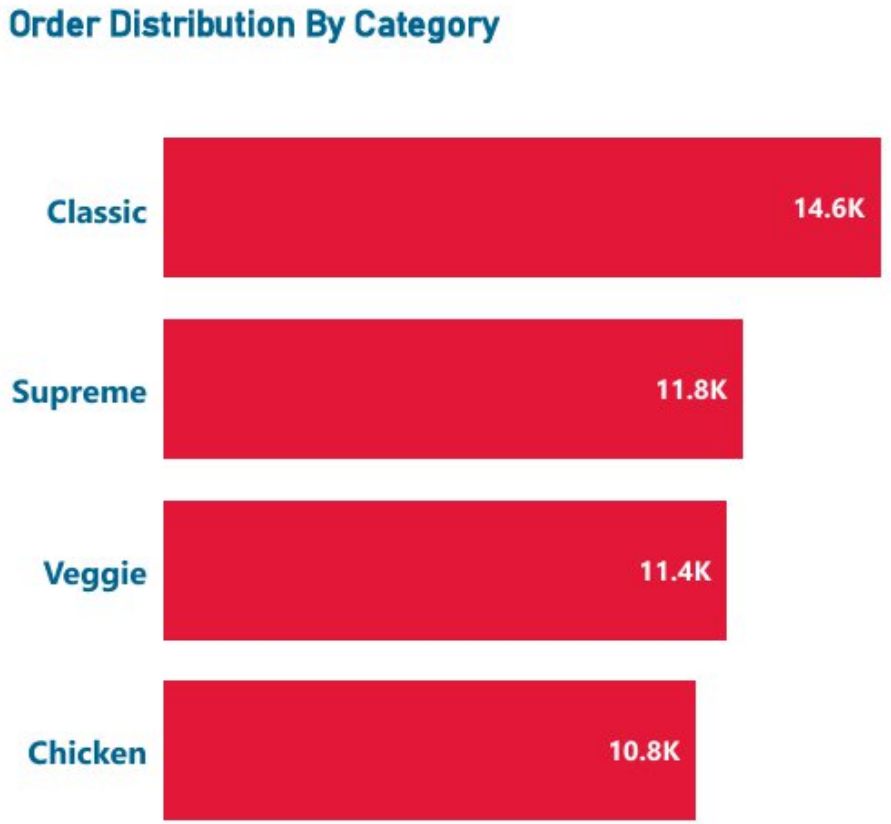
- Percentage contribution highlights **revenue concentration**.
- Useful for understanding product-level revenue dependency.

The Barbecue Chicken Pizza	42,768.00	5%
The Big Meat Pizza	22,968.00	3%
The Brie Carre Pizza	11,588.50	1%
The Calabrese Pizza	15,934.25	2%
The California Chicken Pizza	41,409.50	5%
The Chicken Alfredo Pizza	16,900.25	2%
The Chicken Pesto Pizza	16,701.75	2%
The Classic Deluxe Pizza	38,180.50	5%
The Five Cheese Pizza	26,066.50	3%
The Four Cheese Pizza	32,265.70	4%
The Greek Pizza	28,454.10	3%
The Green Garden Pizza	13,955.75	2%
The Hawaiian Pizza	32,273.25	4%
The Italian Capocollo Pizza	25,094.00	3%
The Italian Supreme Pizza	33,476.75	4%
The Italian Vegetables Pizza	16,019.25	2%
The Mediterranean Pizza	15,360.50	2%
The Mexicana Pizza	26,780.75	3%
The Napolitana Pizza	24,087.00	3%
The Pepper Salami Pizza	25,529.00	3%
The Pepperoni Pizza	30,161.75	4%
The Pepperoni, Mushroom, and Peppers Pizza	18,834.50	2%
The Prosciutto and Arugula Pizza	24,193.25	3%
The Sicilian Pizza	30,940.50	4%
The Soppressata Pizza	16,425.75	2%
The Southwest Chicken Pizza	34,705.75	4%
The Spicy Italian Pizza	34,831.25	4%
The Spinach and Feta Pizza	23,271.25	3%
The Spinach Pesto Pizza	15,596.00	2%
The Spinach Supreme Pizza	15,277.75	2%
The Thai Chicken Pizza	43,434.25	5%
The Vegetables + Vegetables Pizza	24,374.75	3%

KPI 6: Category-wise Distribution (Order Count)

Key Insights

- The **Classic** category accounts for the **highest share of orders**.
- **Supreme and Veggie** categories show **similar order volumes**, indicating balanced demand.
- The **Chicken** category has comparatively lower order counts.



Notes

- Based on **order count**, not revenue.
- Highlights customer **ordering behavior by category**.

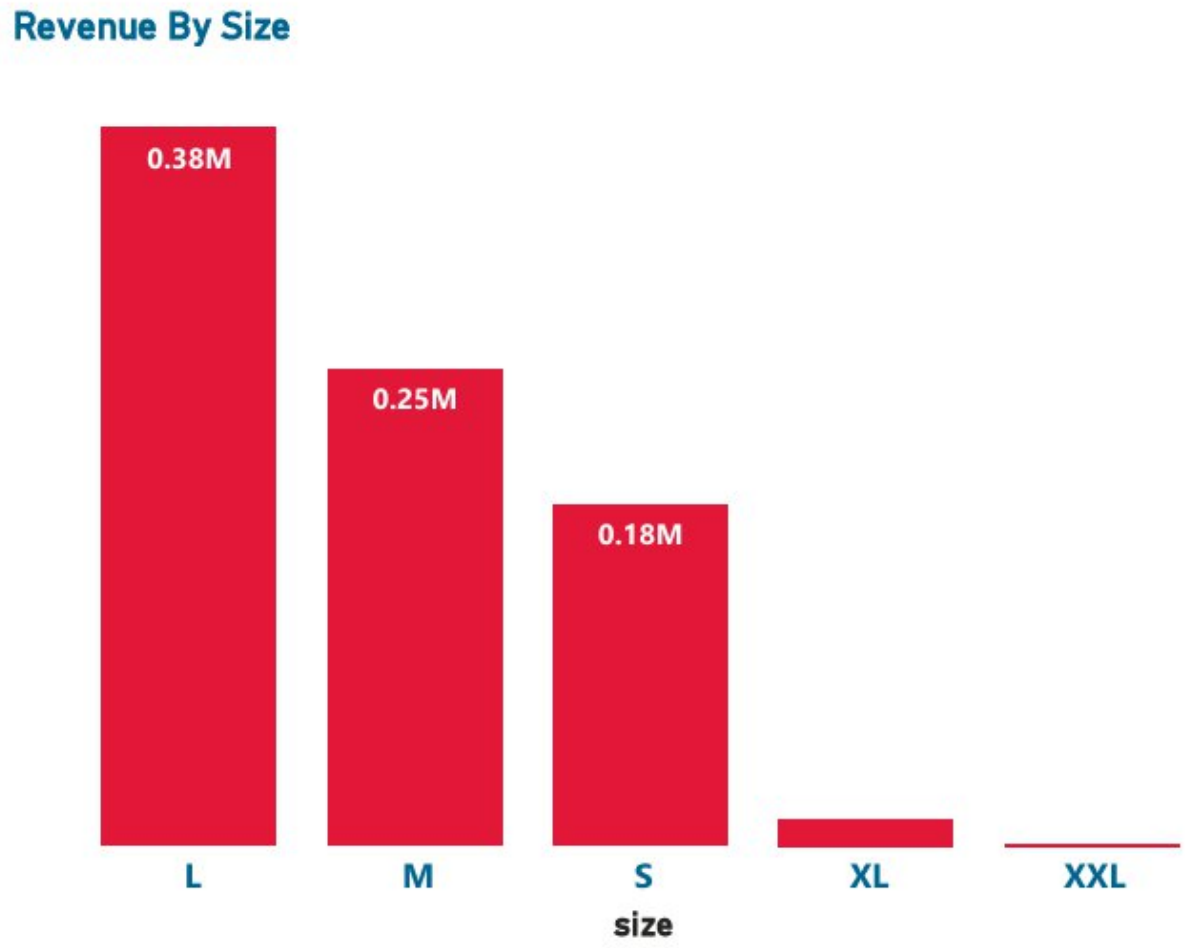
KPI 7: Revenue by Pizza Size

Key Insights

- **Large pizzas** generate the highest share of revenue.
- **Medium and Small** sizes follow, contributing steadily
- **XL and XXL** sizes contribute a relatively smaller portion of revenue.

Notes

- Revenue reflects both pricing and quantity sold.
- Indicates customer preference toward standard sizes.



KPI 8: Average Order Size

Key Insights

•Customers order an average of **~2 pizzas per order**.
•Most orders are **small to medium in size**.
•Provides a baseline for understanding ordering behavior.

Notes

•Calculated as total pizzas ordered per order.
•Used as a supporting behavioral metric

Overall Observations

- Order demand remains **largely stable** with short-term fluctuations.
- Customer activity is **concentrated during specific hours**, especially afternoons.
- Revenue is driven by a **small set of pizzas and standard sizes**.
- Ordering behavior reflects **moderate order sizes** rather than bulk purchases.

Conclusion

- This analysis highlights **key demand patterns, revenue drivers, and customer behavior** using SQL-based exploratory analysis.
- Insights from this project can support **better understanding of operations, product mix, and sales performance**.
- The project demonstrates the use of SQL for **business-focused data analysis and insight communication**.

THANK YOU