

Marvens Pizza Place Sales Analysis Report for 2023

1.0 Introduction

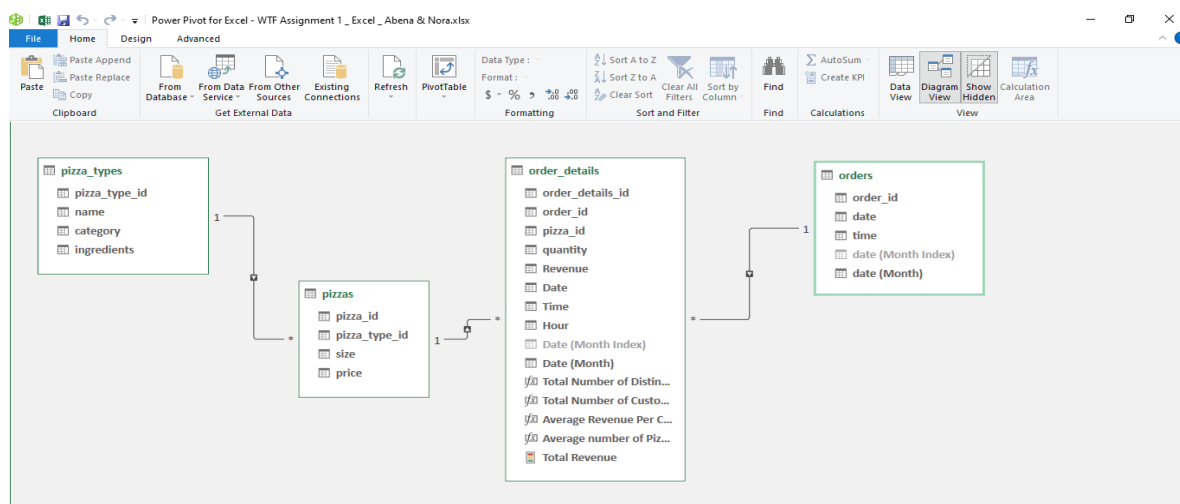
This report presents a comprehensive analysis of the sales data for Marvens Pizza Place for the year 2015. Utilizing datasets, gotten from Maven Analytics (*Free Data Sets & Dataset Samples*, 2022), encompassing orders, order details, pizzas and pizza types, the analysis aims to uncover customer preference, revenue generation, product performance, best sellers, and suggestions for menu optimization.

2.0 Methodology

The analysis was conducted using Microsoft Excel by Nora Anyidoho and Abena Agyemang Gyasi for data manipulation and visualization. Key techniques included:

- Importing and merging datasets.
- Drawing relationships between Different Data Sets (workbooks) using Power Pivot
- Creating Pivot Tables for detailed examination of sales patterns.
- Employing charts for visual representation of trends and insights.

Picture 1: Diagram view of Power Pivot Relationship between data sets

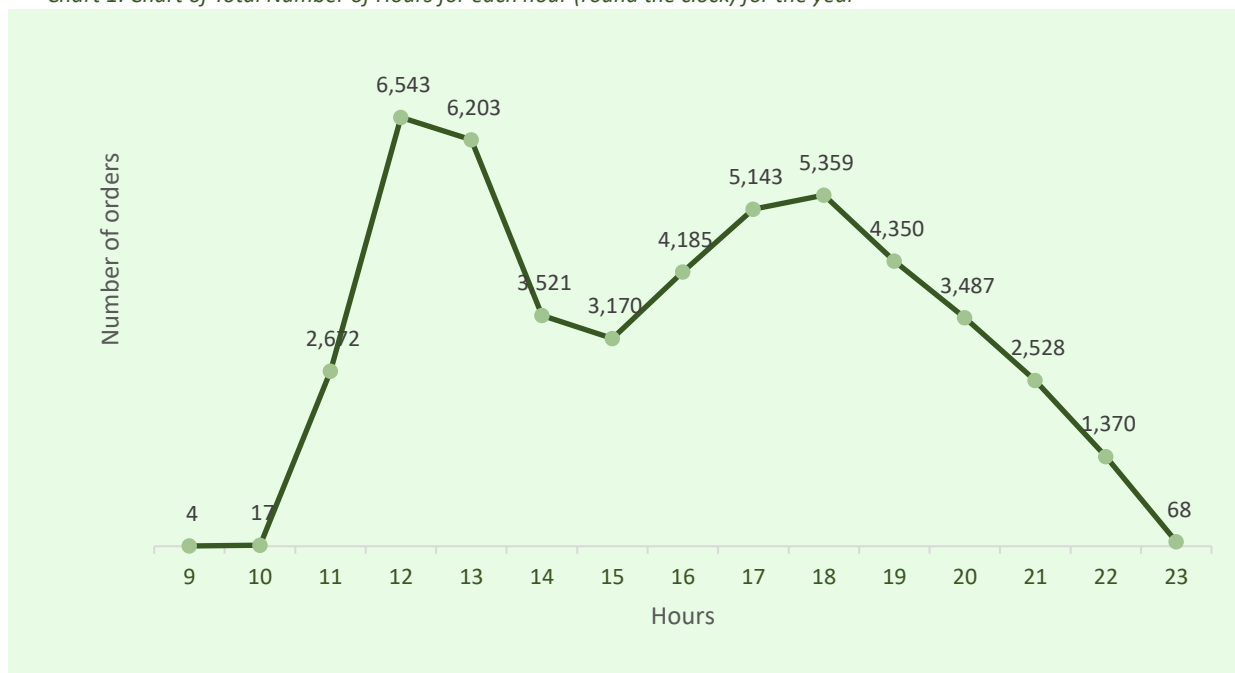


3.0 Key Findings

3.1. Customer Count and Peak Hours

- **Total Number of Distinct Orders:** 48,620.
- **Total Number of Customers:** 21,350.
- **Peak Hours:** 12 PM (6,543 orders), 1 PM (6,203 orders), 6 PM (5,359 orders), and 5 PM (5,143 orders).
- **Off-Peak Hours:** Lowest orders at 9 AM (4 orders), 10 AM (17 orders), and 11 PM (68 orders). Business operating hours are from 9:00 am to 11:00pm

Chart 1: Chart of Total Number of Orders for each hour (round the clock) for the year



3.2. Order Composition and Bestsellers

Average Number of Pizzas per Order: Two (2).

The bestsellers dominated by The Thai Chicken Pizza, The Barbecue Chicken Pizza, and The California Chicken Pizza, indicate a strong customer preference for these specific flavors as shown in Table 1.

Table 1. Top 10 Bestsellers

Pizza Type	Sum of Revenue
The Sicilian Pizza	30,940.50
The Four Cheese Pizza	32,265.70
The Hawaiian Pizza	32,273.25
The Italian Supreme Pizza	33,476.75
The Southwest Chicken Pizza	34,705.75
The Spicy Italian Pizza	34,831.25
The Classic Deluxe Pizza	38,180.50
The California Chicken Pizza	41,409.50
The Barbecue Chicken Pizza	42,768.00
The Thai Chicken Pizza	43,434.25
Grand Total	364,285.45

3.3. Pizza Categories

The pizzas were grouped into four categories: Veggie, Chicken, Supreme, and Classic. Here is how they performed.

Interestingly, while Chicken pizzas had the least number of orders (10,815), Veggie pizzas generated the least revenue (\$193,690). Chicken pizzas generated more revenue than Veggie pizzas, indicating higher profitability per unit.

Chart 2: Number of Pizza sold and Revenue generated for each pizza category

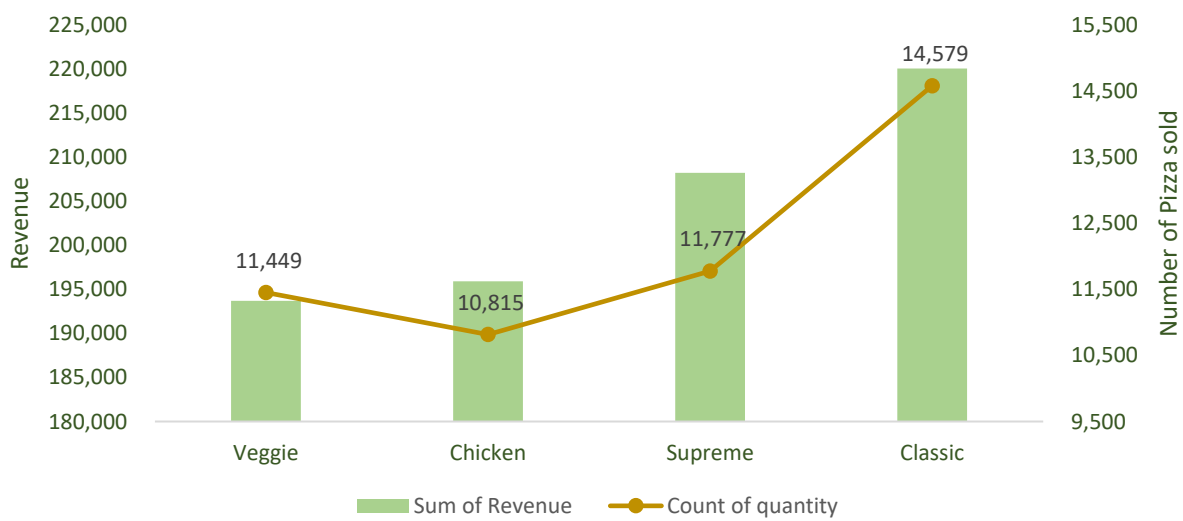


Table 2: Number of Pizza sold and Revenue generated for each pizza category

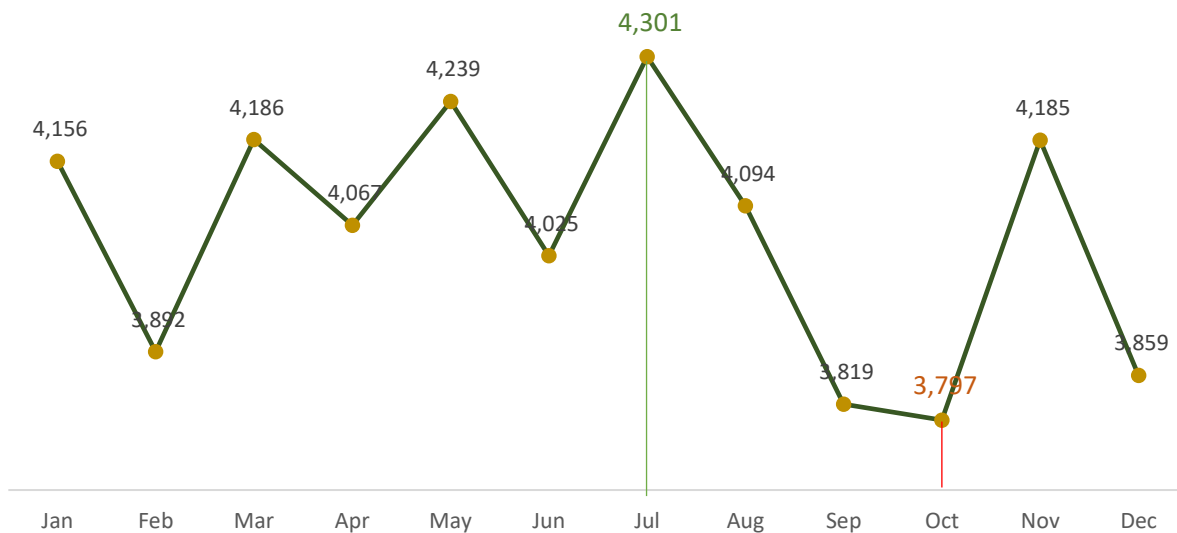
	Quantity of Pizza Sold	Revenue
Veggie	11,449	193,690
Chicken	10,815	195,920
Supreme	11,777	208,197
Classic	14,579	220,053
Grand Total	48,620	817,860

3.4. Annual Revenue and Seasonality

- **Total Revenue for 2015:** \$817,860.05.
- **Highest Sales Month:** July (4,301 orders).
- **Lowest Sales Month:** October (3,797 orders).
- **Average Revenue Per Customer:** \$38.31.

The sales trend demonstrates a potential seasonality, with peak sales in the summer months.

Chart 3: Number of number of pizzas sold per month



4.0 Recommendations

4.1. Menu Optimization

Based on the percentage of order quantity and revenue, the following pizzas underperformed and could be considered for removal from the menu:

- The Brie Carre Pizza: This is the third most expensive pizza, but had the least revenue (1.4%) and least quantity ordered (0.9%).
- The Green Garden Pizza: Had the second least quantity percentages of 1.93% and revenue of 1.87%.
- The Mediterranean Pizza: Had the third least quantity percentages of 1.90% and revenue of 1.88%.

4.2. Promotion Suggestions

- Promotions could be leveraged by Marvens to boost sales of other pizzas, particularly those in the Chicken category, which had fewer orders but generated more revenue than Veggie pizzas. This suggests that customers may be willing to pay more for Chicken pizzas, and promoting these could increase sales and revenue.
- Focus on promoting best-sellers and high-margin items, particularly The Thai Chicken Pizza, The Barbecue Chicken Pizza, and The California Chicken Pizza, to maximize revenue.
- Implement seasonal promotions aligned with observed sales trends. Consider introducing combo deals or promotions during low-sales months like August to boost sales.

The table below details the Quantity sold and revenue generated for each pizza. It also details the respective percentages (as compared to revenue and quantity sold, respectively).

Table 3: detailing the Quantity sold and revenue generated for each pizza, and the respective percentage

Row Labels	Revenue	Quantity sold	Sum of price	% of Total Rev.	% of Total Qty Sold.	Total
Chicken	195,919.50	10,815	301.5			
The Barbecue Chicken Pizza	42,768.00	2,372	50.25	5.23%	4.88%	10.11%
The California Chicken Pizza	41,409.50	2,302	50.25	5.06%	4.73%	9.80%
The Chicken Alfredo Pizza	16,900.25	980	50.25	2.07%	2.02%	4.08%
The Chicken Pesto Pizza	16,701.75	961	50.25	2.04%	1.98%	4.02%
The Southwest Chicken Pizza	34,705.75	1,885	50.25	4.24%	3.88%	8.12%
The Thai Chicken Pizza	43,434.25	2,315	50.25	5.31%	4.76%	10.07%
Classic	220,053.10	14,579	424.7			
The Big Meat Pizza	22,968.00	1,811	48.5	2.81%	3.72%	6.53%
The Classic Deluxe Pizza	38,180.50	2,416	48.5	4.67%	4.97%	9.64%
The Greek Pizza	28,454.10	1,406	109.95	3.48%	2.89%	6.37%
The Hawaiian Pizza	32,273.25	2,370	40.25	3.95%	4.87%	8.82%
The Italian Capocollo Pizza	25,094.00	1,414	48.5	3.07%	2.91%	5.98%
The Napolitana Pizza	24,087.00	1,451	48.5	2.95%	2.98%	5.93%
The Pepperoni Pizza	30,161.75	2,369	37.5	3.69%	4.87%	8.56%
The Pepperoni, Mushroom, and Peppers Pizza	18,834.50	1,342	43	2.30%	2.76%	5.06%
Supreme	208,197.00	11,777	419.65			
The Brie Carre Pizza	11,588.50	480	23.65	1.42%	0.99%	2.40%
The Calabrese Pizza	15,934.25	927	48.75	1.95%	1.91%	3.85%
The Italian Supreme Pizza	33,476.75	1,849	49.75	4.09%	3.80%	7.90%
The Pepper Salami Pizza	25,529.00	1,422	49.75	3.12%	2.92%	6.05%
The Prosciutto and Arugula Pizza	24,193.25	1,428	49.75	2.96%	2.94%	5.90%
The Sicilian Pizza	30,940.50	1,887	48.75	3.78%	3.88%	7.66%
The Soppressata Pizza	16,425.75	957	49.75	2.01%	1.97%	3.98%
The Spicy Italian Pizza	34,831.25	1,887	49.75	4.26%	3.88%	8.14%
The Spinach Supreme Pizza	15,277.75	940	49.75	1.87%	1.93%	3.80%
Veggie	193,690.45	11,449	432.45			
The Five Cheese Pizza	26,066.50	1,359	46.5	3.19%	2.80%	5.98%
The Four Cheese Pizza	32,265.70	1,850	44.45	3.95%	3.81%	7.75%
The Green Garden Pizza	13,955.75	987	48.25	1.71%	2.03%	3.74%
The Italian Vegetables Pizza	16,019.25	975	50.5	1.96%	2.01%	3.96%
The Mediterranean Pizza	15,360.50	923	48.25	1.88%	1.90%	3.78%
The Mexicana Pizza	26,780.75	1,456	48.25	3.27%	2.99%	6.27%
The Spinach and Feta Pizza	23,271.25	1,432	48.25	2.85%	2.95%	5.79%
The Spinach Pesto Pizza	15,596.00	957	49.75	1.91%	1.97%	3.88%
The Vegetables + Vegetables Pizza	24,374.75	1,510	48.25	2.98%	3.11%	6.09%
Grand Total	817,860.05	48,620	1578.3			

5.0 Conclusion

The 2015 sales analysis has provided valuable insights into the sales dynamics at Marvens Pizza Place. The data reveals a healthy diversity in pizza preferences among customers, with a notable

skew towards Chicken and Supreme categories. The data displays a significant demand for pizzas like The Thai Chicken Pizza, The Barbecue Chicken Pizza, and The California Chicken Pizza, indicating their high revenue generation potential.

The analysis also identifies specific peak hours for customer orders, underscoring opportunities for targeted marketing and operational efficiency during these times. Given these insights, it is advisable to concentrate marketing efforts on high-revenue-generating pizzas and categories, especially within the Chicken category.

Additionally, phasing out less popular menu items and leveraging seasonal sales trends can be effective strategies. The proposed menu optimizations and targeted promotions are poised to streamline Marvens Pizza Place's offerings and enhance overall profitability.

6.0 References.

Free Data Sets & Dataset Samples (2022) *Maven Analytics*. Available online: <https://mavenanalytics.io/data-playground> [Accessed 22/11/2023].

7.0 Appendices

Detailed Pivot Tables and Charts (not included in this textual format but to be attached in the actual report).

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