



Pizza Place Sales

Report-2015

By

Neel Balar

"You can't buy happiness. But you can buy pizza, and
that's kind of the same thing."



Pizza Sales

TABLE OF CONTENTS

Problem summary

03

Background

03

Solution

03

Methodology

05

Project scope

06

Goals

06

KPIs

06

Concepts used

07

Conclusion

07

Project Owner

08



Problem Summary:

- Pizza is a popular and widely consumed food item enjoyed by people of all ages around the world. In this project we have been provided with a year's worth of sales from a fictitious pizza place, which includes the date and time of each order and the pizzas served, with additional details on the type, size, quantity, price, and ingredients.
- This report analyses the customer preferences, peak hours, market trends and business performances to promote further growth and profitability of the business.

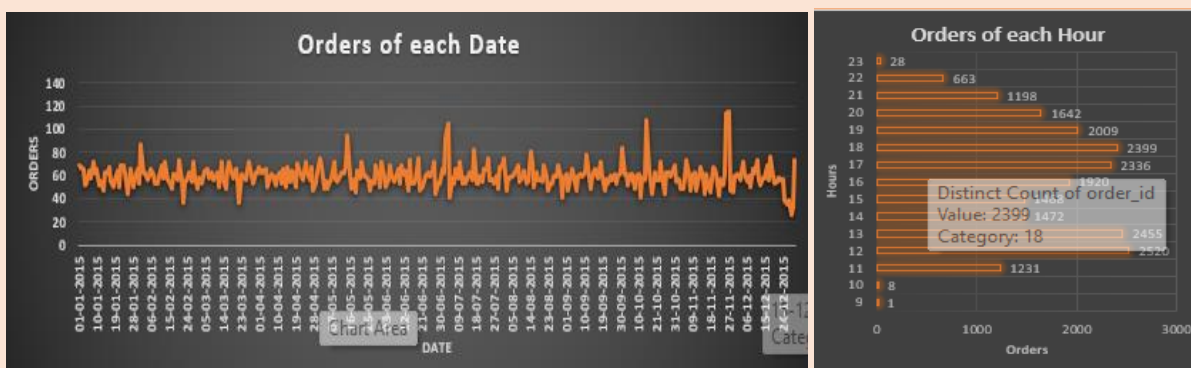
Background:

- The pizza place aims to leverage its business strategy by understanding more about its customers preferences, peak hours, busiest days, best-selling pizzas, understanding the seasonality in the sales, least selling pizza, improving their staff management and building strategies to increase their revenue.
- To perform our analysis, we have been provided with the data of a year's worth sales from a fictitious pizza place, which includes the date and time of each order and the pizzas served, with more details on the type, size, quantity, price, and ingredients. All the data are maintained in an Excel sheet which needs to be cleaned and analyzed.

Solution:

(1) How many customers do we have each day? Are there any peak hours?

- **Average Customers: 60**
- **Peak Hours: 12 pm to 2 pm and 5 pm to 7 pm**



(2) How many pizzas are typically in an order? Do we have any bestsellers?

- Pizzas per order: 3
- Best seller Pizza: [big_meat_s](#) => Orders: 1811
- Best seller Pizza type: [The Classic Deluxe Pizza](#) => Orders: 2329

(3) How much money did we make this year? Can we identify any seasonality in the sales?

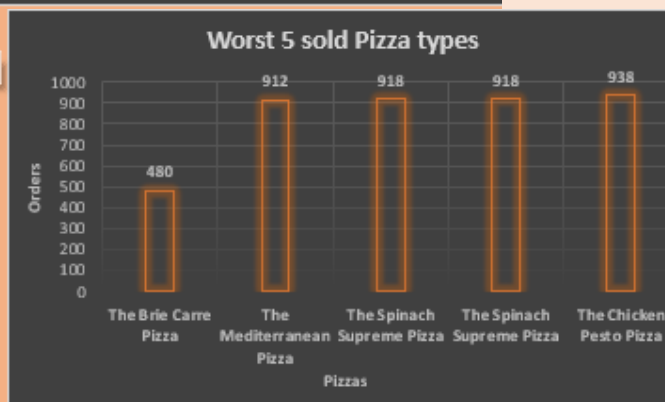
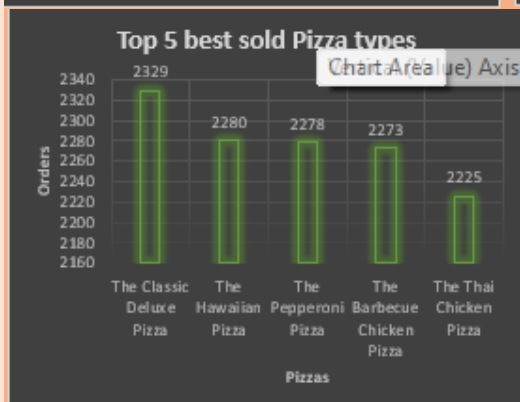
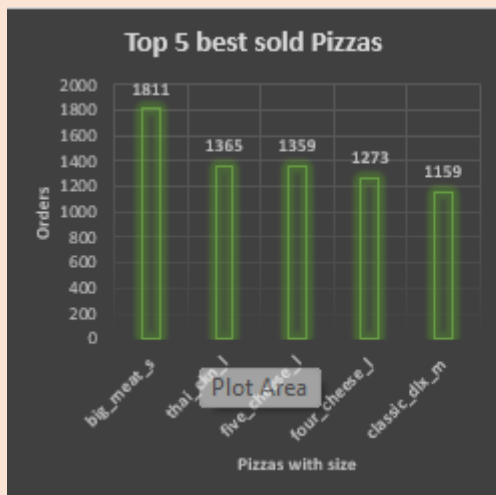
- Total Revenue: \$ 817860
- Most Sale in a particular month: [July](#)



- Most Sale in a particular season: [Summer & Spring](#)
- Most Sale in a particular day: [26/11](#) and [27/11](#)

(4) Are there any pizzas we should take off the menu, or any promotions we could leverage?

- Worst sold Pizza: [the_greek_xxl](#)
- Most sold Pizza: [big_meat_s](#)
- Worst sold Pizza type: [The Brie Carre Pizza](#)
- Best sold Pizza types: [The Classic Deluxe Pizza](#), [The Hawaiian Pizza](#), [The Pepperoni Pizza](#), [The Barbecue Chicken Pizza](#), [The Thai Chicken Pizza](#)



Methodology:

The following methods are followed in our data analysis-

1. **Data Collection:** We downloaded the csv dataset from Kaggle:
2. <https://www.kaggle.com/datasets/mysarahmadbhat/pizza-place-sales>
3. **Data Cleaning & organization:** The collected data is cleaned and organized in a comprehensive manner. The date and time are converted into suitable formats and organized, and thorough understanding of the data dictionary is done to do necessary analysis.
4. **Data Analysis:** Using Excel formulas we performed necessary calculations. The obtained data is visualized using Excel tools like Pivot table graphs and charts.
5. **Conclusions:** On the basis of our analysis, we identified the business trends, sales patterns, peak hours and more opportunities for business growth.

Project Scope:

Our analysis aims to answer the following questions-

- 1.How many customers do they have each day? Are there any peak hours?
- 2.How many pizzas are typically in an order? Do they have any bestsellers?
- 3.How much money did they make this year? Can we identify any seasonality in the sales?
- 4.Are there any pizzas they should take off the menu, or any promotions they could leverage?

Goals:

1. Identify Customer Preferences: The primary goal is to understand customer preferences as it helps in tailoring the menu offerings to serve the customers better.
2. Optimize Menu and Pricing Strategies: Analyzing pizza sales data helps determine the popularity and profitability of different menu items, thereby maximizing business revenue and profit.
3. Identify Peak Sales Periods: Analyzing sales data over different time periods allows businesses to identify peak hours and understand seasonal patterns. This information helps with inventory management, staffing decisions and promotional planning to meet customer demand during busy periods.
4. Forecasting and Planning: Using historical sales data, businesses can develop forecasting models to predict future sales and plan accordingly.

KPIs:

The major KPIs in our entire pizza place sales analysis are as follows:

- Number of customers each day
- Number of orders in queue at a given time
- Peak hours
- Top bestselling pizza
- Revenue generated in a year
- Seasonality in sale
- Least selling pizza

Concepts used:

The key approach used in the Pizza Place Sales data analysis is mainly Excel based concepts.

1. Data Import: Excel allows us to import data from various sources, such as CSV files, databases, or other spreadsheet formats.
2. Data Cleaning: Excel provides tools to clean and prepare data for analysis. Here, we checked for blanks and used "Find and Replace" to correct errors or inconsistencies in the data
3. Sorting and Filtering: Excel allows us to sort and filter data based on specific criteria. We sorted data on the basis of order_id, order_id_details and other fields for analysis. Filtering enables us to display specific subsets of data based on certain conditions or values.
4. Formulas and Functions: Excel's formula and function capabilities are essential for performing calculations and deriving insights from data. Functions such as SUM, AVERAGE, COUNT, ROUND, Multiplication, VLOOKUP, sorting and conditional formatting are used in this analysis to calculate totals and perform conditional analysis.
5. Pivot Tables: Pivot Tables are a powerful feature in Excel for summarizing and analyzing large datasets. We created Pivot Tables to calculate total number of customers per day, total revenue generated, best-selling Pizza, peak hours and other information. Pivot Tables allow for easy exploration and visualization of data.
6. Charts and Graphs: Excel provides a range of chart types (bar charts, line charts, pie charts, etc.) to visually represent data. By creating charts and graphs, we visually analyzed patterns, trends, and disparities in the data. By leveraging these Excel concepts, we effectively analyzed, manipulated, and visualized Pizza Place Sales data to gain insights, identify trends, and support evidence-based decision-making.

Conclusion:

- The given dataset is a useful tool for examining the year's sales at a fictitious pizza restaurant. It can be used to investigate a number of suggested analysis inquiries about pizza orders and sales. Depending on the precise issues and objectives of the analysis, Excel or other data analysis tools and techniques may be used.
- The dataset provides a thorough overview of the sales and ordering trends for pizza, which may be utilised to develop insights and make sensible decisions. For individuals interested in the food sector and seeking to make data-driven decisions based on the

trends and patterns revealed in the data, doing a thorough study of the information is imperative.

- In conclusion, by leveraging the insights gained from the analysis of pizza sales data, we can make informed decisions, enhance customer satisfaction, and drive business growth in the highly competitive pizza market.

Project Owner:

- Neel Balar
- 10th July, 2023