



95%

Positive
Feedback

PIZZA SALES ANALYSIS USING EXCEL

"Indulge in our mouthwatering pizzas – where every slice is a taste of perfection!"

PRESENTED BY: NOVAN RIZKI WICAKSONO

BUSINESS BACKGROUND & SCOPE

In **2015**, the global pizza market was influenced by various key trends, such as

1. Increasing demand for premium/gourmet pizza options.
2. Growing demand for quick-service restaurants and food delivery.
3. Increasing popularity of artisanal and customized pizzas
4. Need for data-driven decision making in competitive markets.
5. Rapid growth of online ordering platforms (early adoption phase).

In business context, this analysis uses a real-world pizza sales dataset from Kaggle containing:

1. **12 months** of transactional data (**48,620 orders**).
2. Sales metrics from a mid-sized pizzeria (typical of SMB restaurant challenges), demonstrating how Excel can transform raw sales data into actionable business insights.



4,8

Reviews

DESCRIPTION



Data Analysis: The project involves analyzing sales data from a pizza business, focusing on key metrics such as total revenue, average order value, total pizzas sold, and total orders.



Visualization of Trends: Through charts and graphs, the project aims to visualize sales trends, including daily and hourly trends for total orders, percentage of sales by pizza category and size, and total pizzas sold by category.



Identification of Top Sellers: The project identifies the top 5 best and worst-selling pizzas based on total pizzas sold, providing insights into customer preferences and popular menu items.



Actionable Recommendations: By analyzing metrics and insights, the project aims to provide actionable recommendations for optimizing business operations and enhancing customer satisfaction.

EXECUTIVE SUMMARY

OBJECTIVE

This project aim to conduct an in-depth analysis of our pizza sales data to glean valuable insights into the performance of our business. The main objective of this project is to identify key indicators that provide a comprehensive understanding of our sales dynamics and overall business health. By calculating metrics such as total revenue, average order value, total pizzas sold, total orders, and average pizzas per order, we aim to understand the dynamics of our pizza sales and identify areas for improvement.



KEY FINDING

We aim to analyze key indicators for our pizza sales data to gain insights into our business performance. Specifically, we want to calculate the following metrics:

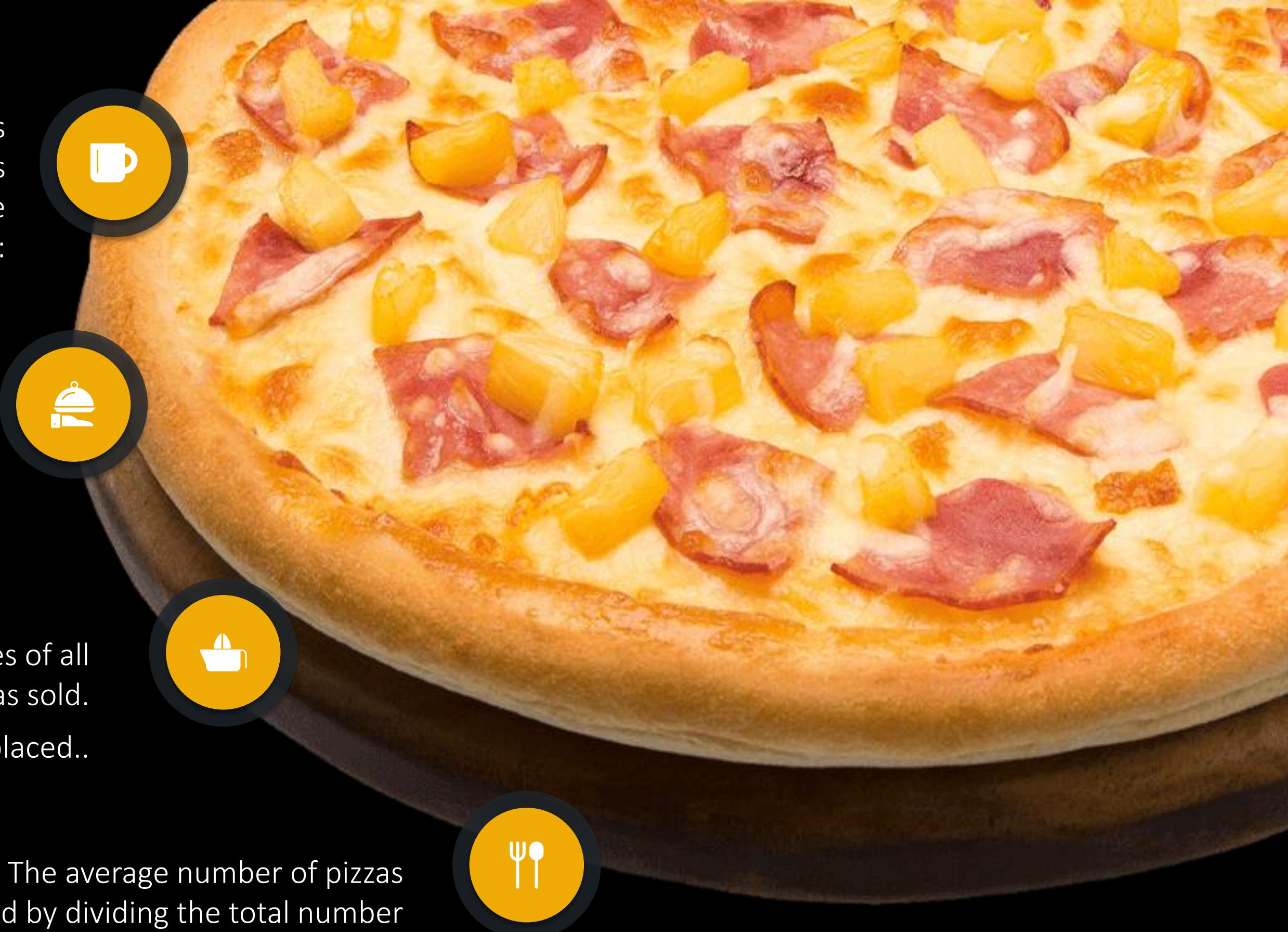
Total Revenue: The sum of the total price of all pizza orders.

Average Order Value: The average amount spent per order, is calculated by dividing the total revenue by the total number of orders.

Total Pizzas Sold: The sum of the quantities of all pizzas sold.

Total Orders: The total number of orders placed..

Average Pizzas Per Order: The average number of pizzas sold per order, calculated by dividing the total number of pizzas sold by the total number of orders..



PROJECT BACKGROUND



The pizza industry thrives on data-driven decision-making to maximize sales, optimize operations, and enhance customer satisfaction. Businesses in this domain need to leverage data-driven insights to optimize sales, improve customer satisfaction, and enhance operational efficiency. This project focuses on analyzing Pizza Sales Data obtained from Kaggle to uncover **trends, patterns, and key performance indicators (KPIs)** that can drive strategic decision-making for a pizza restaurant or chain.

This project leverages Microsoft Excel to analyze a Pizza Sales Dataset (from [Kaggle](#)) and extract actionable business insights. By utilizing Excel's built-in functions, PivotTables, and visualization tools, we aim to uncover **sales trends, customer preferences, and revenue opportunities for a pizza restaurant**.



PROBLEM STATEMENT

Daily Trend for Total Orders:

Create a bar chart that displays the daily trend of total orders over a specific period. This chart will help us identify any patterns or fluctuations in order volumes daily..

Hourly Trend for Total Orders:

Create a line chart that illustrates the hourly trend of total orders throughout the day. This chart will allow us to identify peak hours or periods of high-order activity.

Percentage of Sales by Pizza Category:

Create a pie chart that shows the distribution of sales across different pizza categories. This chart will provide insights into the popularity of various pizza categories and their contribution to overall sales.



Percentage of Sales by Pizza Size a pie chart that represents the percentage of sales attributed to different pizza sizes. This chart will help us understand customer preferences for pizza sizes and their impact on sales.

Total Pizzas Sold by Pizza Category:

Create a funnel chart that presents the total number of pizzas sold for each pizza category. This chart will allow us to compare the sales performance of different pizza categories.

Top 5 Best Sellers by Total Pizzas Sold:

Create a bar chart highlighting the top 5 best-selling pizzas based on the total number of pizzas sold. This chart will help us identify the most popular pizza options.

Weekly Trend for Total Orders:

Create a line chart that illustrates the weekly trend of total orders throughout the year. This chart will allow us to identify peak weeks or periods of high order activity.

METHODOLOGY

1. Defining Project Background

Understanding the background of the project

3. Exploratory Data Analysis

Explore the data and gather information about initial dataset

5. Data Visualization

Visualize data with chart & dashboard & communicate it with presentation

2. Data Preparation & Cleaning

Gather the data and cleaning (missing value, duplicate, unused data, etc)

4. Data Analysis

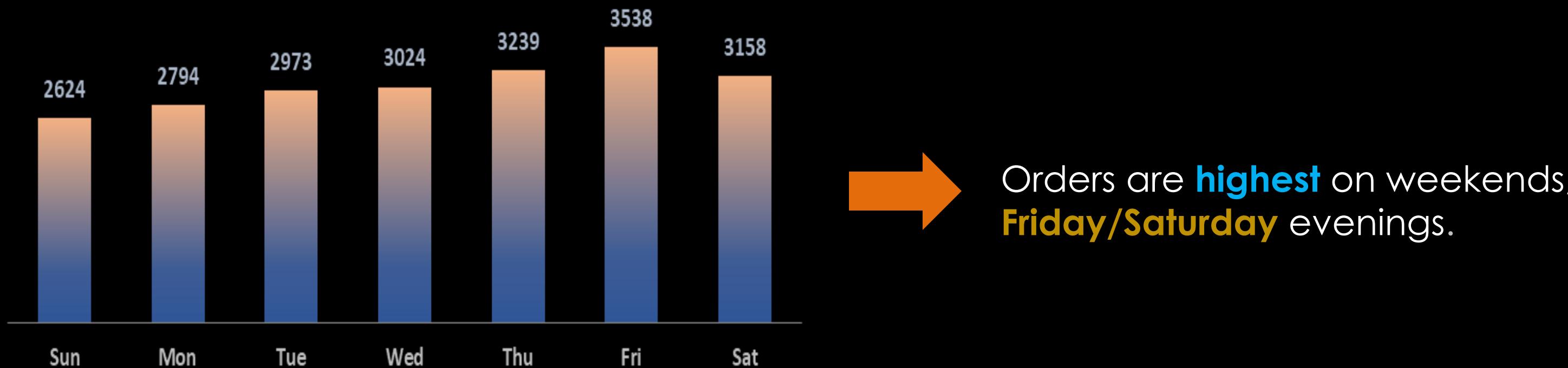
Analyze sales data by time, category, size, and rating

6. Insight & Recommendation

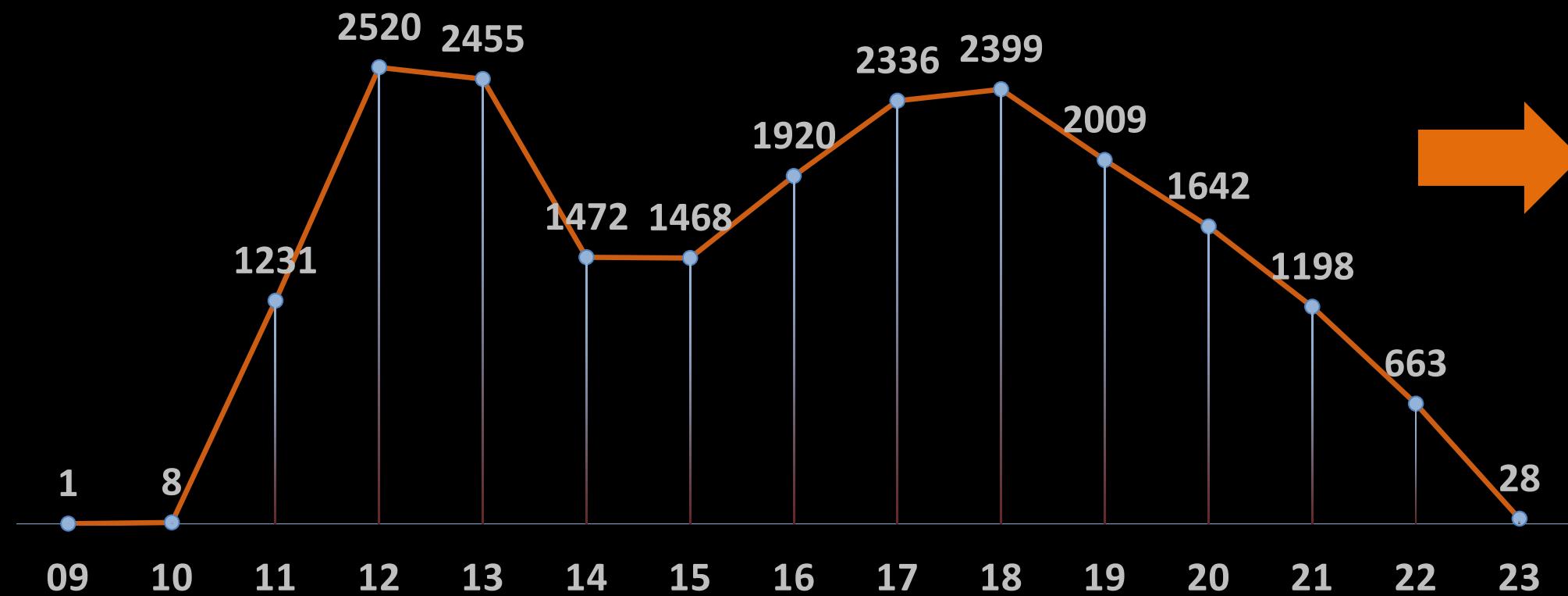
Address insight and give recommendation from the analysis

PIZZA ANALYSIS

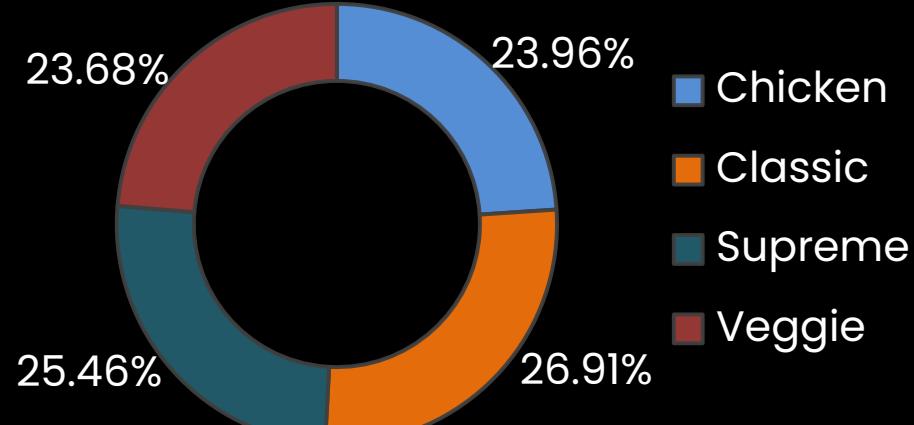




Orders are **highest** on weekends,
Friday/Saturday evenings.



There are **maximum** orders from **12-01pm** & **after 5 – 8 pm.**



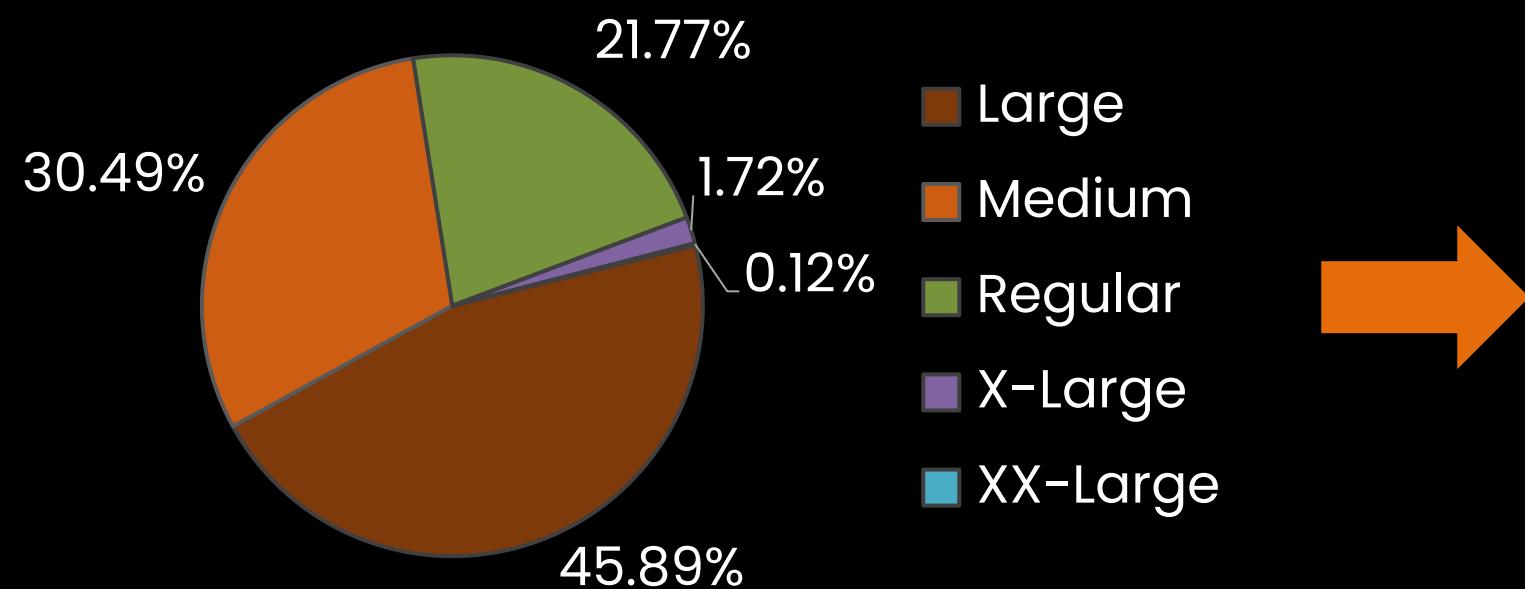
Classic Category contributes to **maximum** sales & total orders.



Classic Deluxe & Chicken pizzas are the sellers and revenue generators.



The Brie Carre is at the bottom in both orders and revenue.



Large size pizza contribute to **maximum** sales



INSIGHT, CONCLUSION & RECOMMENDATION

PIZZA INSIGHT

Sales Trends: Weekends, particularly Fridays and Saturdays



Best & Worst Sellers: Chicken pizzas emerge as the top revenue generators, while the Brie Carre pizza ranks lowest



Peak Hours: Maximum orders occur during lunchtime (12-1pm) and in the evening (5-8pm)



Customer Preferences: Understanding customer preferences for pizza categories and sizes can help tailor marketing strategies



Sales by Category & Size: Classic pizzas contribute significantly to total sales and orders, with large size pizzas



Best pizza customer demands



CONCLUSION

1. Sales Patterns & Busy Times

- a) Highest Days: **Friday** and **Saturday** (weekends) are the periods with the highest demand.
- b) Peak Hours: **12-1 pm (lunch)** and **5-8 pm (dinner)**.

2. Customer Preferences

- a) Most Popular Category: **Classic Pizza** (such as Margherita, Pepperoni) and **Prime Veggie** are bestsellers.
- b) Favorite Sizes: **Large** dominates sales, indicating customers prefer economic value for sharing.

3. Best & Worst Performing Products

- a) Best Seller: **Chicken pizza** generated the highest revenue.
- b) Worst Seller: **Brie Carre (Brie cheese)** had the lowest sales.

RECOMMENDATION

For Marketing Team

1. **Promote High-Margin Pizzas:** Focus marketing on premium & best-selling pizzas.
2. **Dynamic Pricing Strategy:** Offer discounts strategically on slow days (e.g., Tuesday).

For Team & Store Manager

1. **Staff Scheduling Adjustments:** Increase workforce during peak hours (lunch & weekends).
2. **Menu Optimization:** Remove or revamp consistently underperforming pizzas

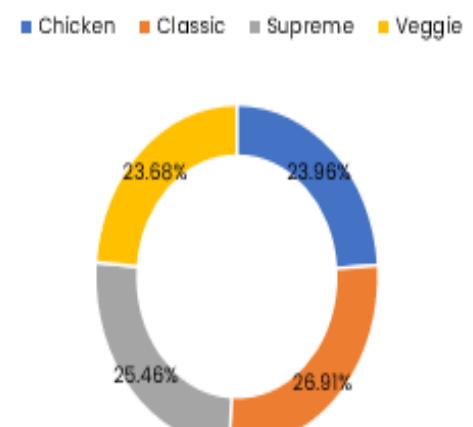
APPENDICES



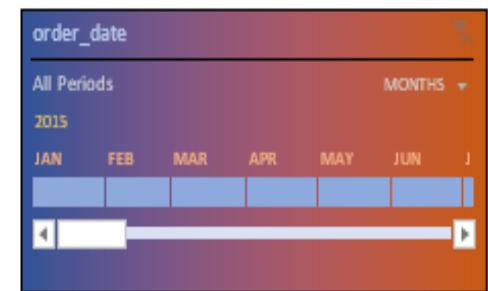
Dataset & Analysis

1. Dataset from [Kaggle](#)
2. Microsoft Excel (Dashboard & Analysis)

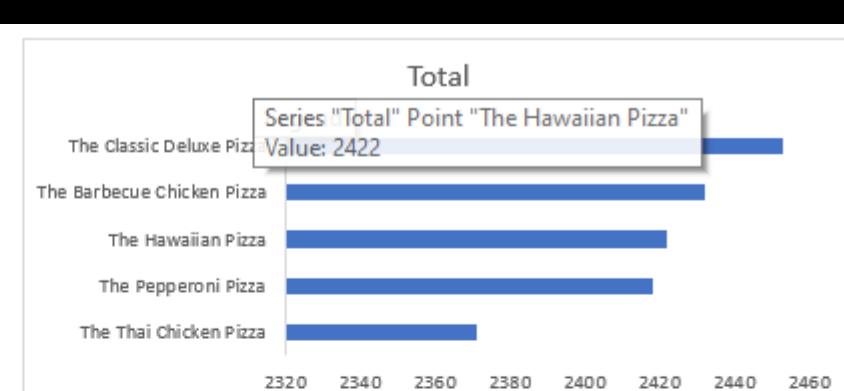
Row Labels	Sum of total_price
Chicken	195919.5
Classic	220053.1
Supreme	208197
Veggie	193690.45
Grand Total	817860.05



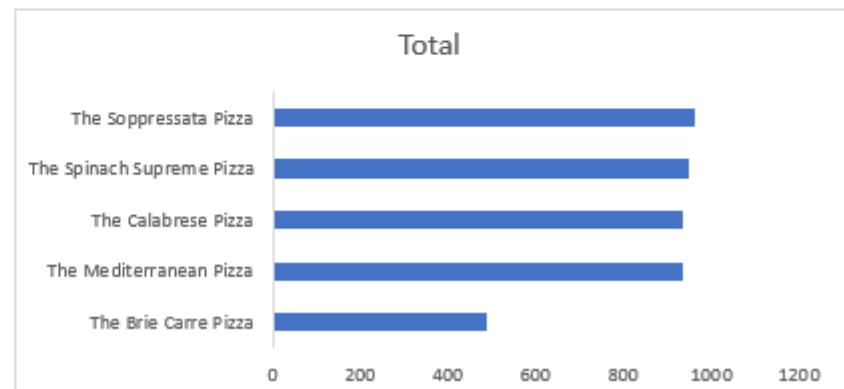
Row Labels	Sum of quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050
Grand Total	49574



Row Labels	Sum of quantity
The Thai Chicken Pizza	2371
The Pepperoni Pizza	2418
The Hawaiian Pizza	2422
The Barbecue Chicken Pizza	2432
The Classic Deluxe Pizza	2453



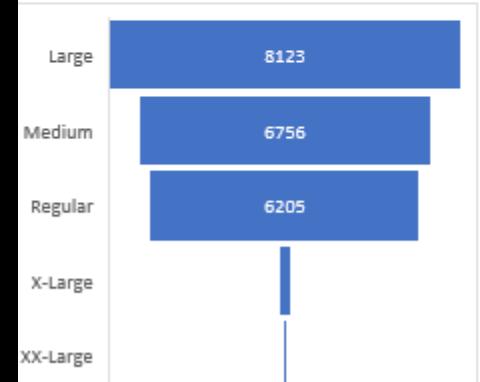
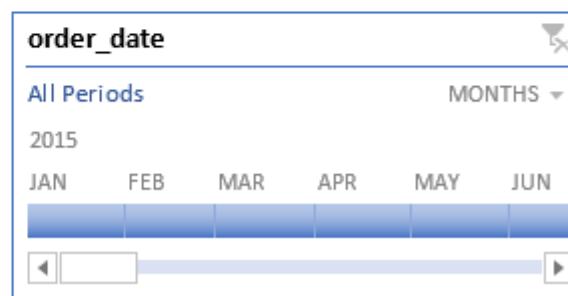
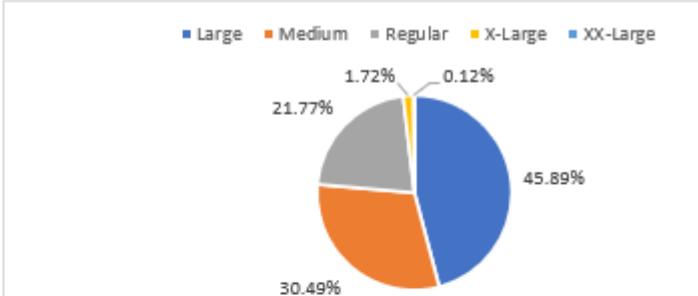
Row Labels	Sum of quantity
The Brie Carre Pizza	490
The Mediterranean Pizza	934
The Calabrese Pizza	937
The Spinach Supreme Pizza	950
The Soppressata Pizza	961



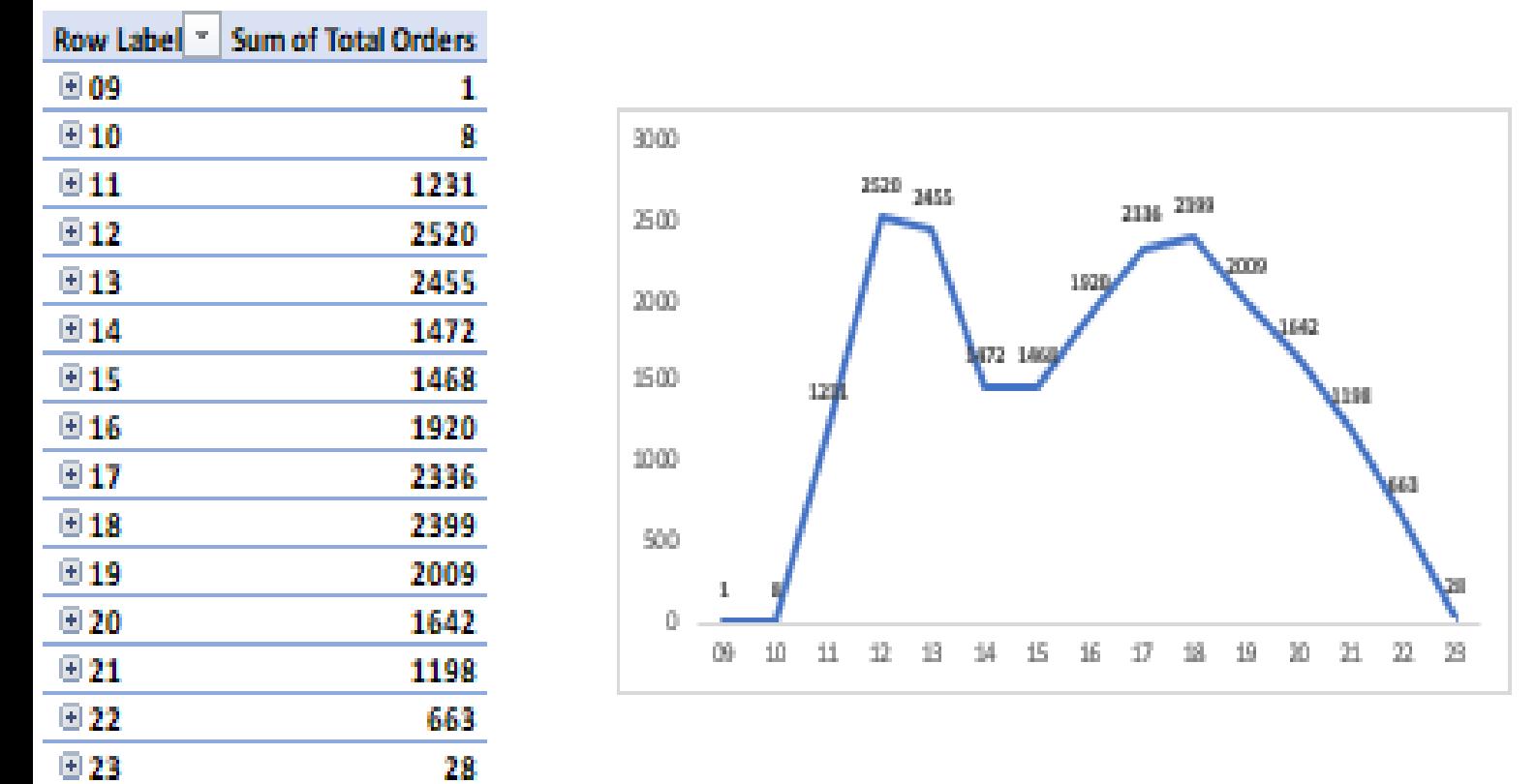
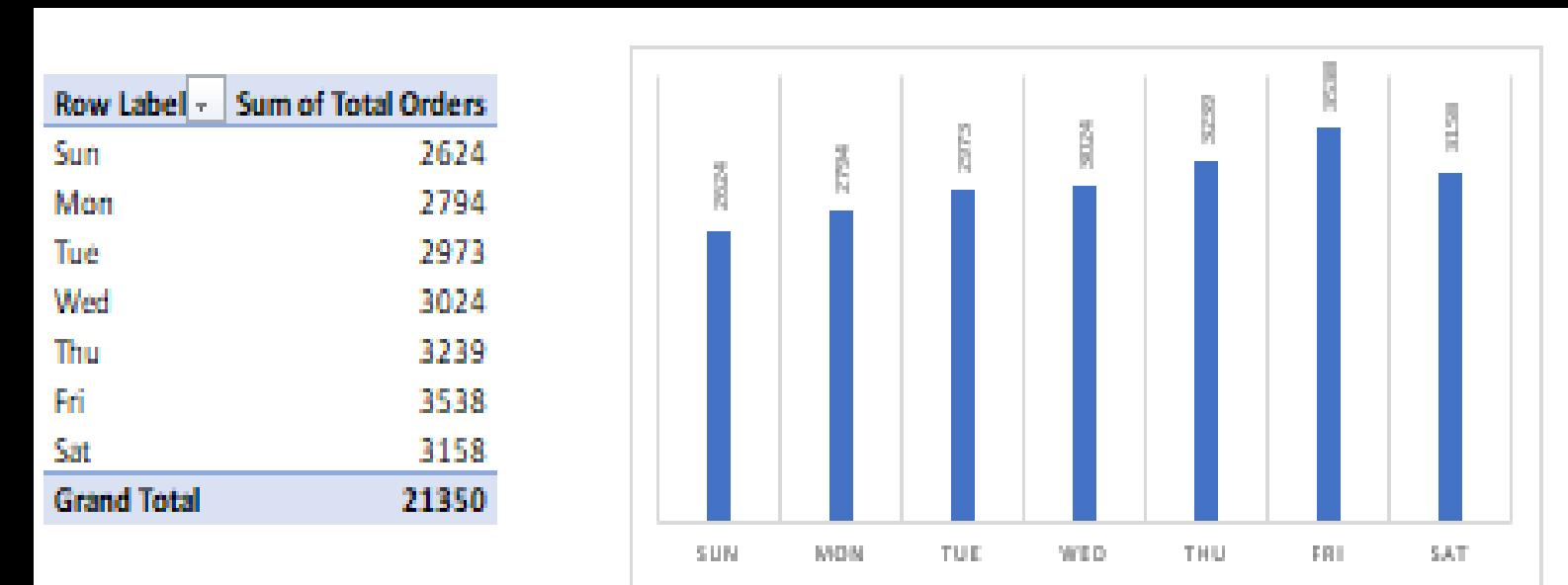
Sum of total_price	Sum of quantity	Sum of Total Orders	Avg Order Value	Avg Pizzas Per Order
817860.05	49574	21350	\$38.31	2.32
\$817,860	49,574	21,350		

Row Labels	Sum of total_price
Large	375318.7
Medium	249382.25
Regular	178076.5
X-Large	14076
XX-Large	1006.6
Grand Total	817860.05

Row Labels	Sum of Total Orders
Large	8123.264161
Medium	6756.222822
Regular	6205.29589
X-Large	250.8306804
XX-Large	14.38644689
Grand Total	21350



Pizza Size	Total Orders
Large	8123
Medium	6756
Regular	6205
X-Large	251
XX-Large	14



PIZZA



SALES

Total Revenue

\$817,860

Avg Order Value

\$38.31

Total Pizzas Sold

49,574

Total Orders

21,350

Avg Pizzas Per Order

2.32

Busiest Days & Times

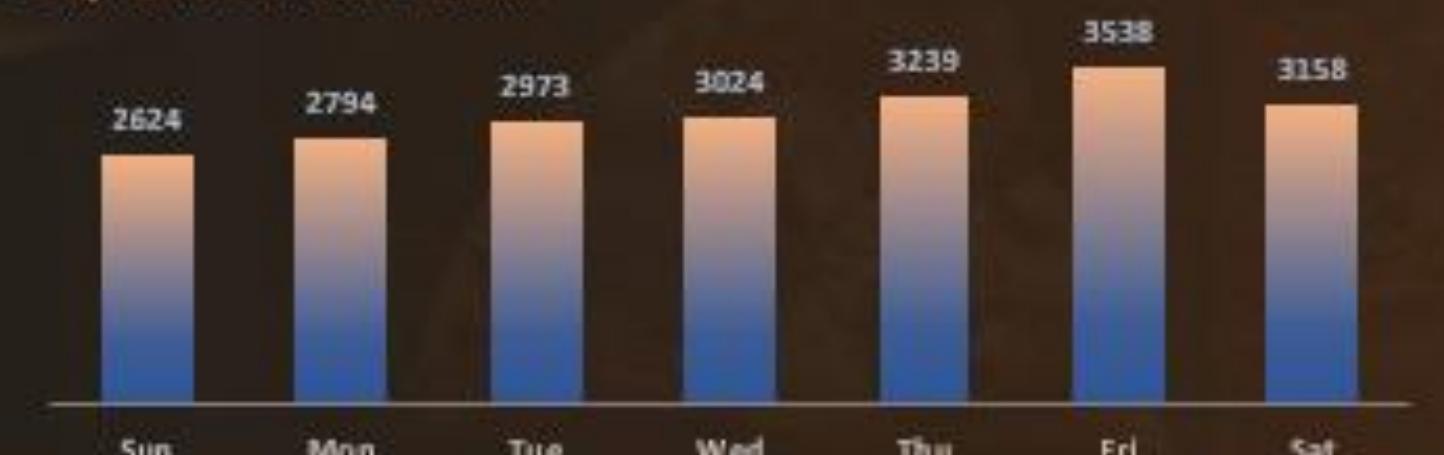
DAYS

Orders are highest on weekends, Friday/Saturday evenings.

TIMES

There are maximum orders from 12-01pm & after 5 - 8pm.

Daily Trend for Total Orders



Hourly Trend for Total Orders



Sales by Category & Size

CATEGORY

Classic Category contributes to maximum sales & total orders.

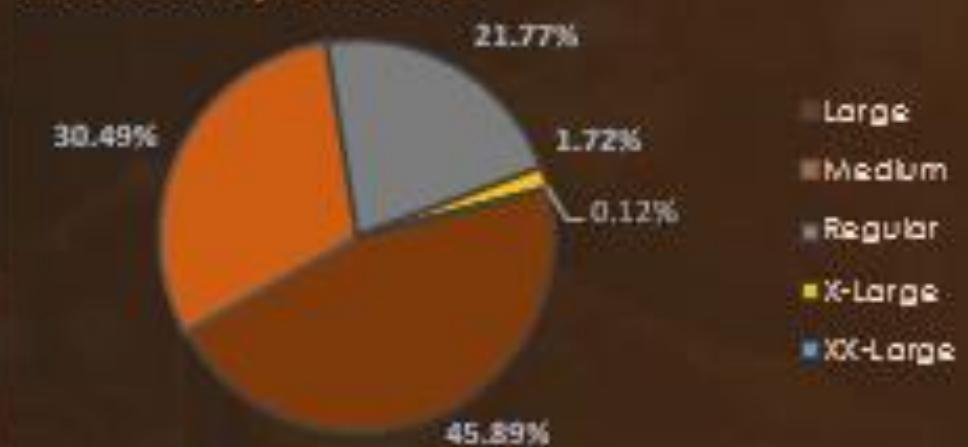
SIZE

Large size pizza contribute to maximum sales

% of Sales by Pizza Category



% of Sales by Pizza Size



Total Pizzas Sold by Pizza Category



Best & Worst Sellers

BEST

Classic Deluxe & Chicken pizzas are the sellers and revenue generators.

WORST

The Brie Carre is at the bottom in both orders and

Top 5 Best Sellers by Total Pizzas Sold



Bottom 5 Worst Sellers by Total Pizzas Sold



Timeline Slicer/ Filter

