

Pizza Sales Analysis

SQL + Excel

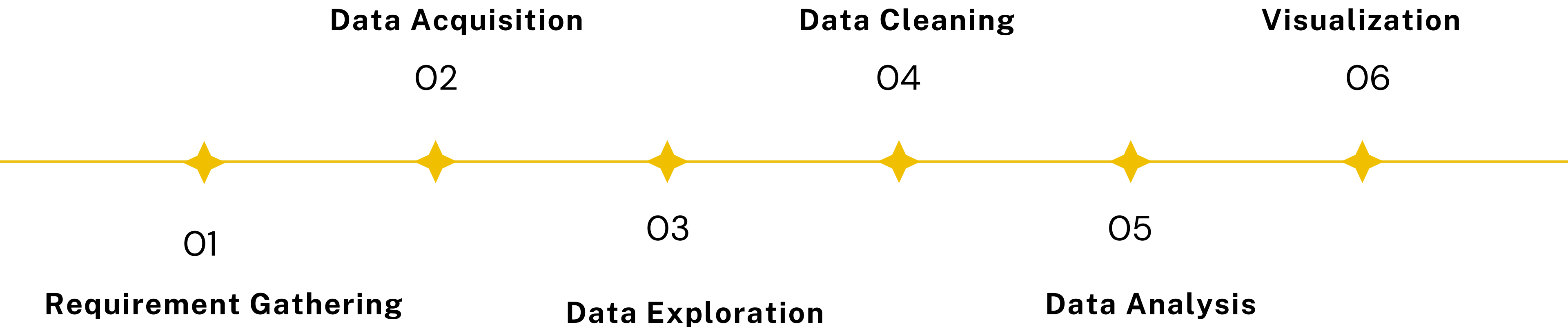
Data Analyst Portfolio Project

Overview

Pizza Sales Analysis

The Pizza Sales Project is a data analysis and visualization project aimed to analyzing and visualizing sales data from a fictional pizza restaurant chain. This project utilizes SQL for data extraction and transformation and Microsoft Excel for data visualization. The goal of this project is to provide insights and actionable information to help the pizza restaurant chain optimize its operations, improve sales, and enhance customer satisfaction.

Phases of SQL Project



Project Components



Data Acquisition

Collect raw sales data like customer orders, product details, dates, and amounts. The data can come from databases, CSV files, or other sources.

Data Transformation with SQL

Use SQL to clean and organize the data. This includes combining tables, summarizing data, fixing missing info, and adding new calculations.

Data Analysis

Analyze the data using SQL to find useful insights, such as:

- Top-selling pizza flavors.
- Sales trends over time.
- Customer preferences and demographics.
- Average order values.
- Total Orders

Project Components



Microsoft Excel Visualization

Excel is used to create interactive and informative visualizations that showcase the insights gained from the data analysis. The visualizations may include:

- Pie charts for sales by category.
- Time series charts for total orders.
- Funnel charts for total sold by category .
- Bar charts for total sales.
- Dashboards with key performance indicators (KPIs).

Requirement

We need 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, calculated by dividing 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.

We would like to visualize various aspects of our pizza sales data to gain insights and understand key trends. We have identified the following requirements for creating charts:

- Daily Trend for Total Orders
- Hourly Trend for Total Orders
- Percentage of Sales by Pizza Category
- Percentage of Sales by Pizza Size
- Total Pizzas Sold by Pizza Category
- Top 5 Best Sellers by Total Pizzas Sold

Pizza_sales SQL...9U2HD6TK\hp (78))*

```
CREATE DATABASE pizza_sales
```

```
select * from pizza_sales
```

```
--Total revenue
```

```
select SUM(total_price) as total_revenue from pizza_sales
```

```
--Average order value
```

```
select sum(total_price) / count(distinct order_id) as Avg_order_value from pizza_sales;
```

```
--Total Pizza sold
```

```
select sum(quantity) as Total_sold from pizza_sales;
```

```
--Total order
```

```
select count(distinct order_id) as Total_order from pizza_sales;
```

```
--Average Pizza per order
```

```
select sum(quantity) / count(distinct order_id) from pizza_sales;
```


Pizza_sales SQL...9U2HD6TK\hp (78))*

```
--Daily trend for total orders
=select DATENAME(DW, order_date) as order_day, count(distinct order_id) as total_orders
from pizza_sales
group by DATENAME(DW, order_date);

--Hourly trend for total_orders
=select DATEPART(HOUR, order_time) as order_hours, count(distinct order_id) as total_orders
from pizza_sales
group by DATEPART(HOUR, order_time)
order by DATEPART(HOUR, order_time);

--Percentage of sales by Pizza category
=select pizza_category, sum(total_price) * 100 / (select sum(total_price) from pizza_sales)
from pizza_sales
group by pizza_category;
```

Pizza_sales SQL...9U2HD6TK\hp (78))*

```
--Percentage of sales by pizza size
select pizza_size, sum(total_price) * 100 / (select sum(total_price) from pizza_sales)
from pizza_sales
group by pizza_size
order by pizza_size desc;

--Total pizzas sold by pizza category
select pizza_category, sum(quantity) as total_sold
from pizza_sales
group by pizza_category;

--Top 5 best sellers by total pizza sold
select TOP 5 pizza_name, sum(quantity) as total_pizza_sold
from pizza_sales
group by pizza_name
order by sum(quantity) ASC;
```



SQL and Excel Project

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Thank You

