

# **E-COMMERCE DATA ANALYSIS USING SQL**

**Exploring Sales Trends and Insights with SQL Queries**

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# Dataset Overview

Dataset Name:-e-commerce\_dataset\_updated

## Description

This dataset captures transactional data from an e-commerce platform.




## Visual Preview

User_Id	Product_Id	Catogory	Price	Discount	Final Price	Payment Method	Purchase Date
337c166f	f414122f-e	Sports	36.53	15	31.05	Net Banking	12-11-2024
d38a19bf	fde50f9c-5	Clothing	232.79	20	186.23	Net Banking	09-02-2024
d7f5f0b0	0d96fc90-3	Sports	317.02	25	237.76	Credit Card	01-09-2024
395d4994	964fc44b-d	Toys	173.19	25	129.89	UPI	01-04-2024
a83c145c	d70e2fc6-e	Beauty	244.8	20	195.84	Net Banking	27-09-2024

## Objectives

To analyze e-commerce transaction data and uncover sales trends, customer preferences, and payment patterns.

### **Specific Goals (Bullet Points):**

- ▶  Identify the most popular product categories and their contribution to overall sales.
- ▶  Assess the impact of discounts on customer purchase behavior.
- ▶  Analyze the distribution of payment methods to understand customer preferences.

## Methodology

This project follows a systematic process to analyze the e-commerce dataset, focusing on data cleaning, SQL queries, and insights generation.

Data Import --> Data Cleaning --> SQL Queries --> Insights

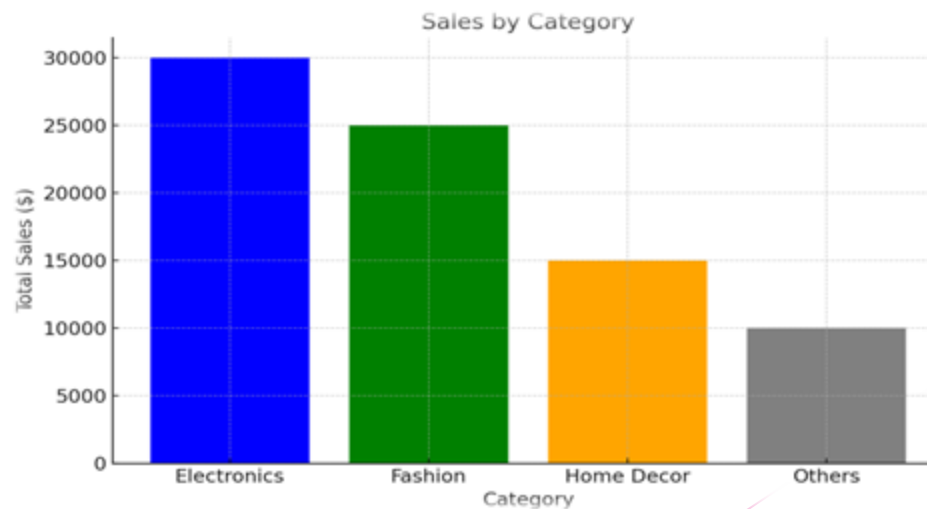
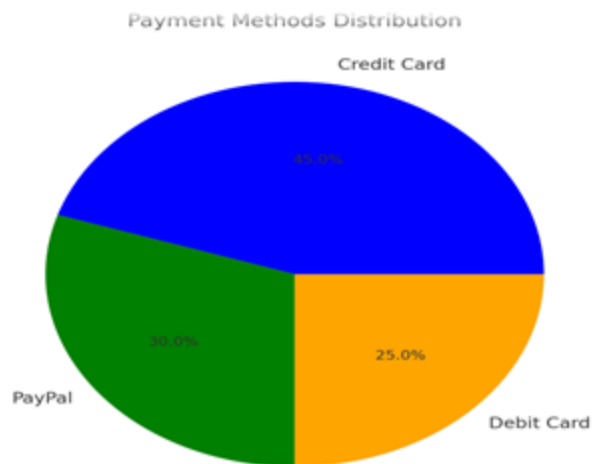
- ❖ *This methodology ensures accurate insights and actionable recommendations for e-commerce optimization.*
- ❖ *This flowchart illustrates the sequential steps in analyzing e-commerce data, leading to insights on sales patterns and customer behavior.*

## Key Insights

*The analysis of the e-commerce dataset provided valuable insights into product performance, customer behavior, and sales trends over time.*

- 🛒 Sales Trends
- 💳 Payment methods
- 💰 Revenue-related insights

These insights highlight key opportunities to enhance strategy and improve performance.



## Conclusion and Recommendations

Based on the analysis of e-commerce transactions, several key insights were discovered. These insights offer valuable opportunities for business optimization.

- ❖ Expand Popular Product Categories.
- ❖ Offer Targeted Discounts During Off-Peak Periods.
- ❖ Encourage the Use of Preferred Payment Methods.

By implementing these strategies, businesses can enhance customer satisfaction, increase revenue, and drive long-term growth.

Thank you for your time and attention!

THANK



YOU

I'd be happy to take any questions you may  
have.