



PRPOTENTIAL. THE ALLURE OF PHECY

# Data Management for Prophecy

Database Design, Implementation & Insights

# Agenda

**1** Introduction to Prophecy

**2** Key Functions and Processes

**3** Data Product's Purpose

**4** ERD Overview

**5** SQL Analysis & Business Insights

**6** Conclusion & Key Takeaways

# Meet The Team



**Francesco Capo**

Project Lead



**Yingxi Liu**

SQL Developer



**Suwen Liu**

SQL Developer



**Arsh Subhan**

Business Strategist



**Tejaswini Shankar**

Data Analyst



**Musa Vijdani**

Data Analyst



**Ishleen Kaur**

SQL Developer

# Introduction to Prophecy

## Company Overview

An e-commerce startup selling street-wear clothing, catering to a diverse audience.

## Business Model

A seamless e-commerce platform that manages customer interactions, inventory, and transactions efficiently.

## Key Features

Data-driven decision-making, optimized marketing, streamlined order fulfillment, and supplier collaboration.

## Challenges Faced

- Inventory Mismanagement
- Delayed Shipments
- Ineffective Promotions

# Core Functions

## Customer Relationship Management (CRM)

- Customer segmentation
- Loyalty tracking
- Personalized shopping experiences



- Long-term relationships
- Repeat purchases

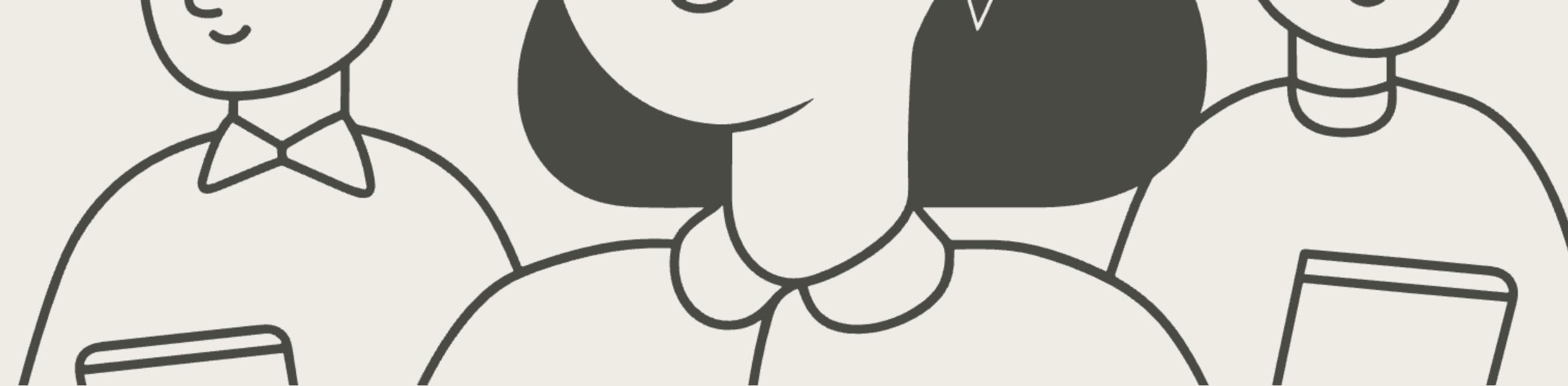
## Inventory Management

- Tracks stock levels
- Manages supplier relationships
- Prevents over/understocking.



Fulfillment of customer orders





# Business Operations



## Order Processing

- Managing transactions efficiently
- Applying discounts
- Handling payments securely



## Marketing & Promotions

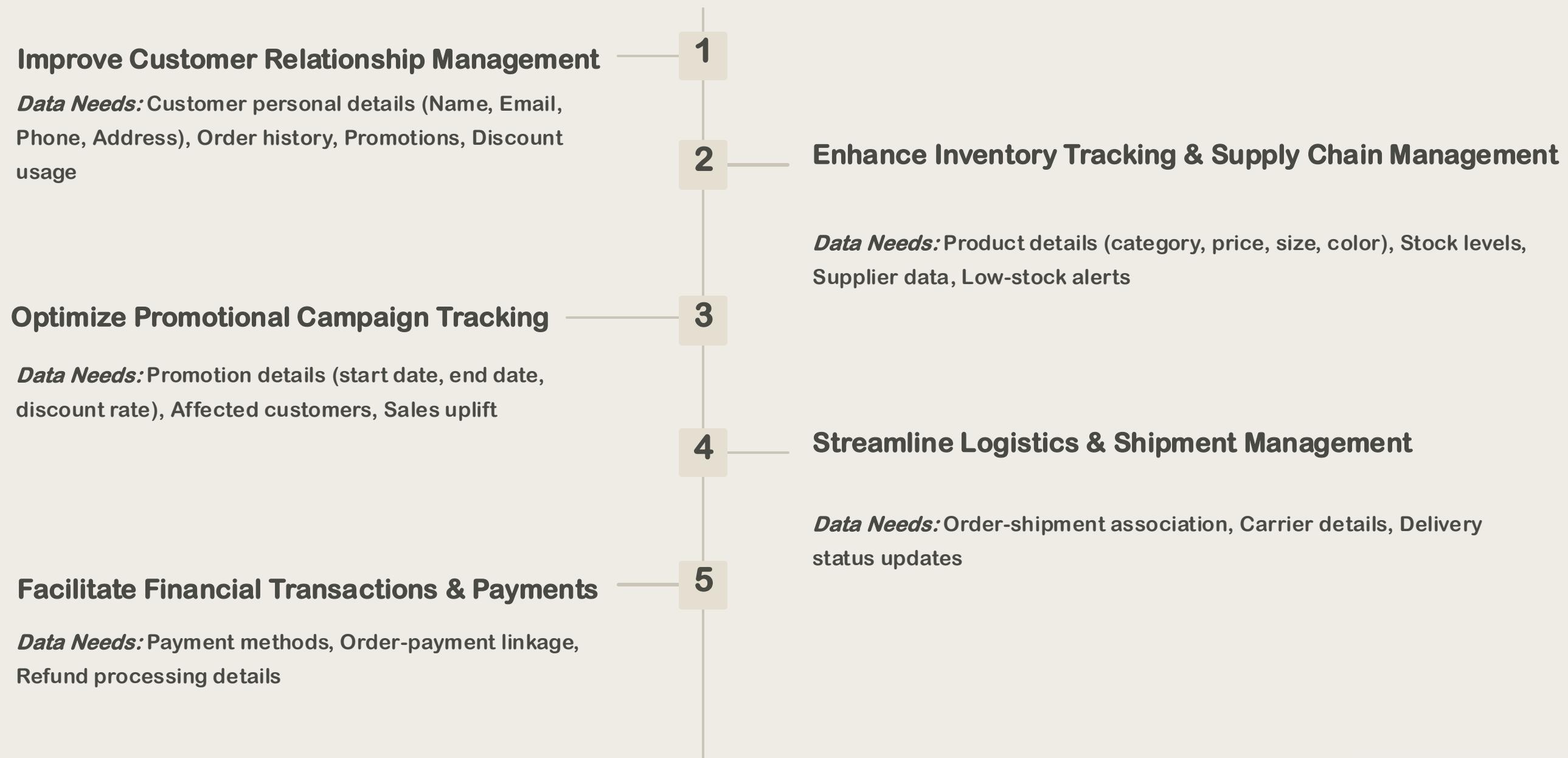
- Creating targeted campaigns
- running personalized promotions
- Optimizing marketing spend.



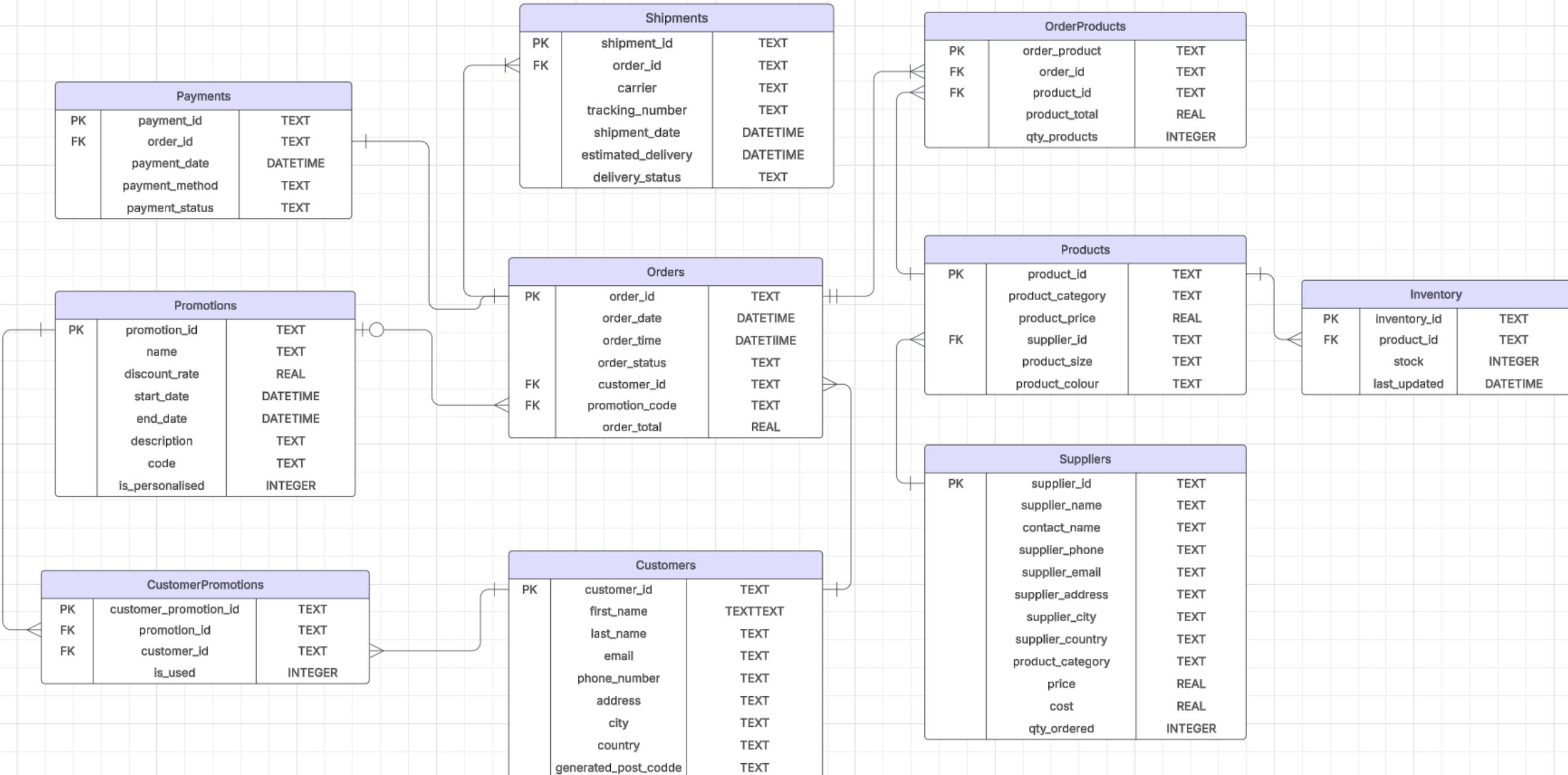
## Sales Performance Monitoring

- Revenue trends
- Customer purchasing behavior.

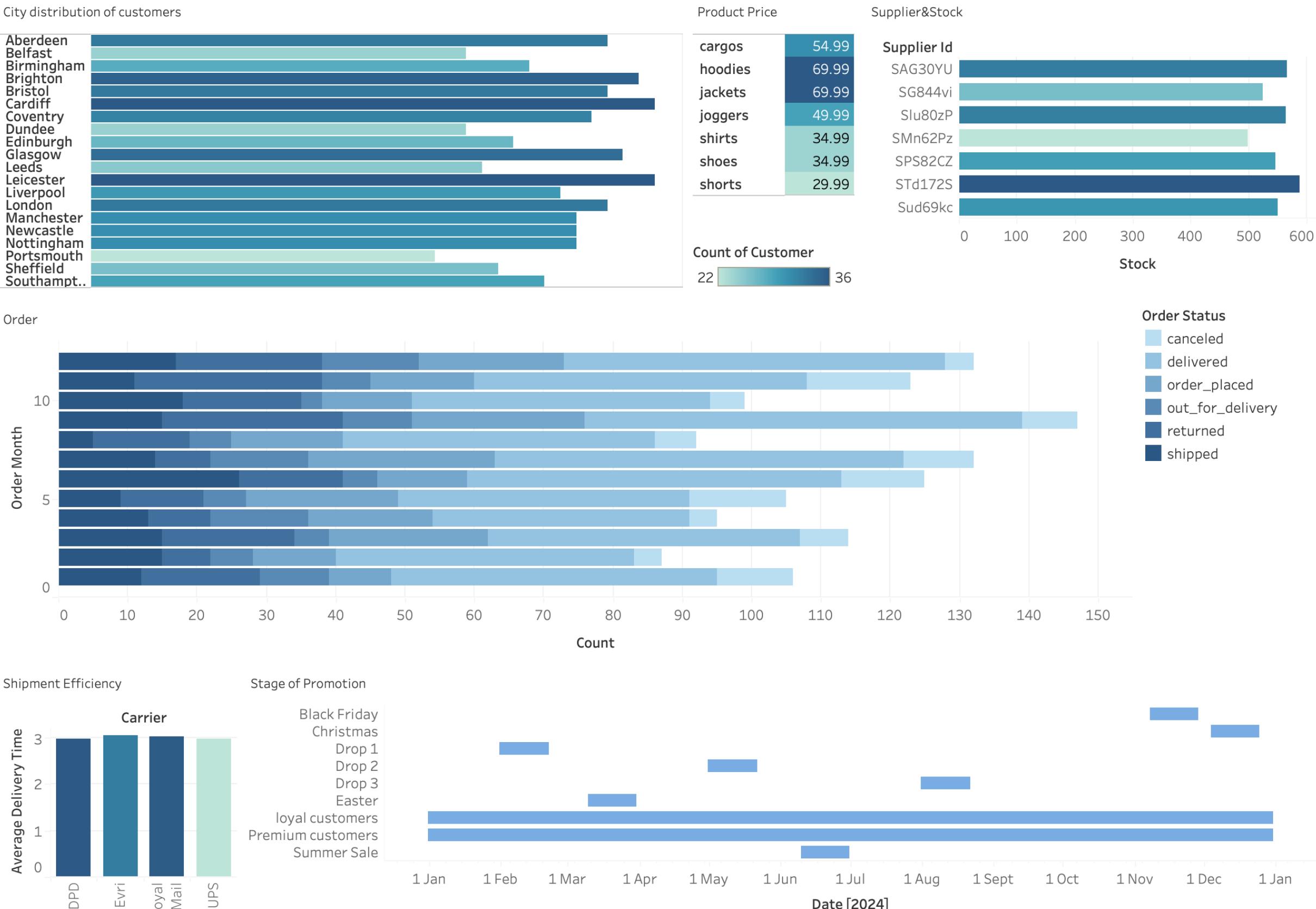
# Data Product's Purpose – How It Helps Prophecy



# ERD Overview



# Data Overview





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# SQL Analysis

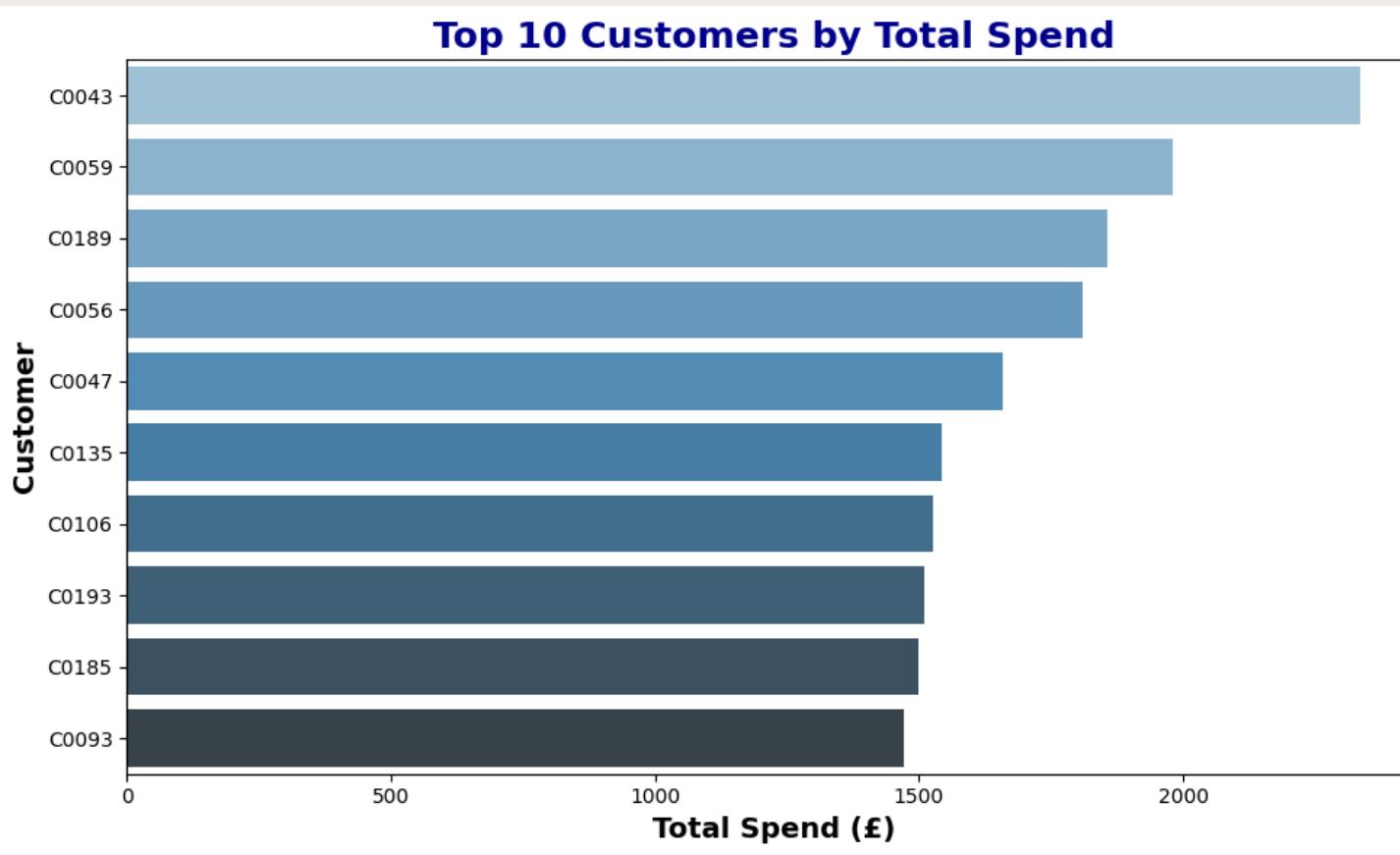
Outputs and Insights

# Customers' Orders Analysis

**Objective:** Identifies high-value customers based on total spending & repeat purchases.

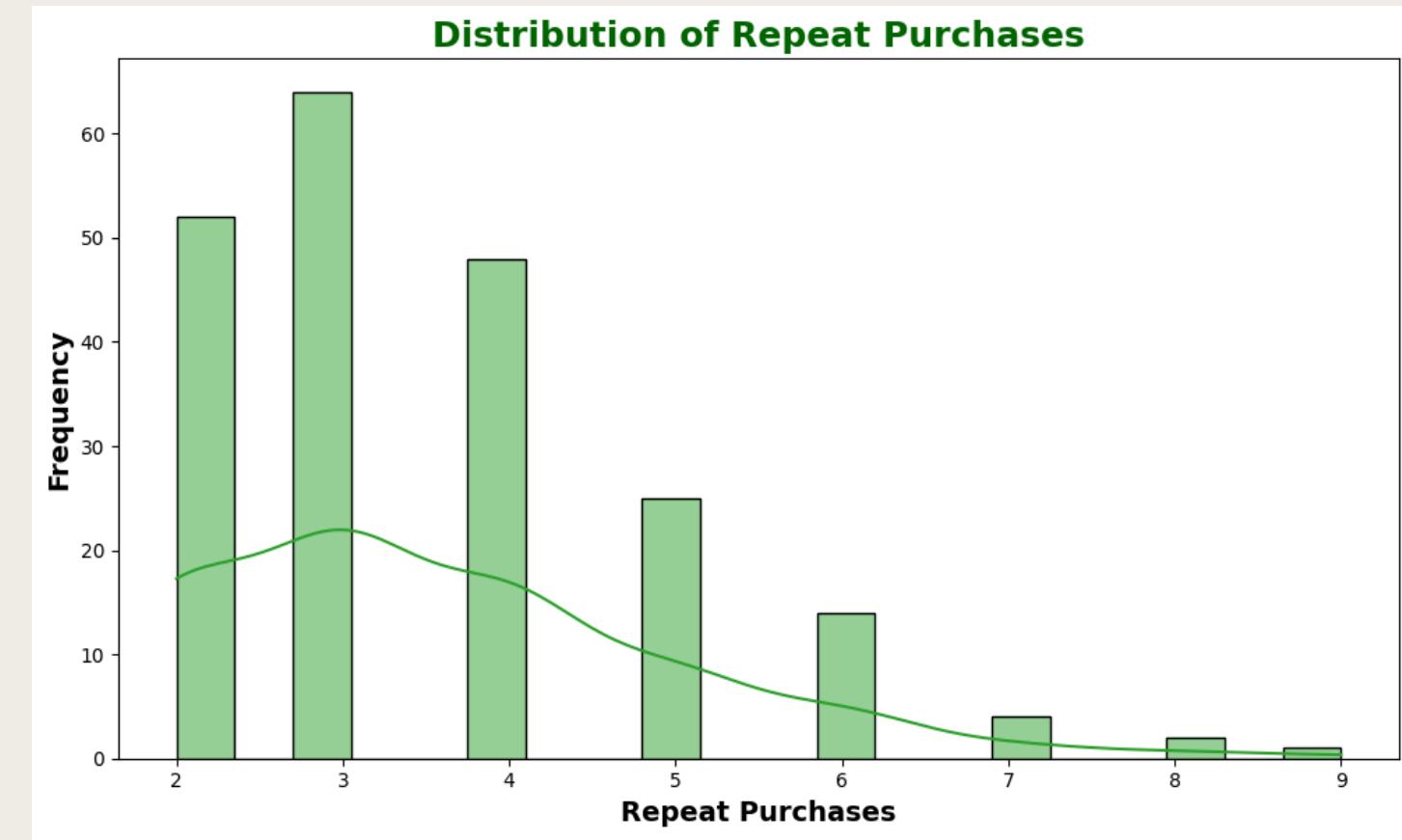
## Top Customers

**Top 10 Customers by Total Spend**



## Customer Repeat Purchases

**Distribution of Repeat Purchases**

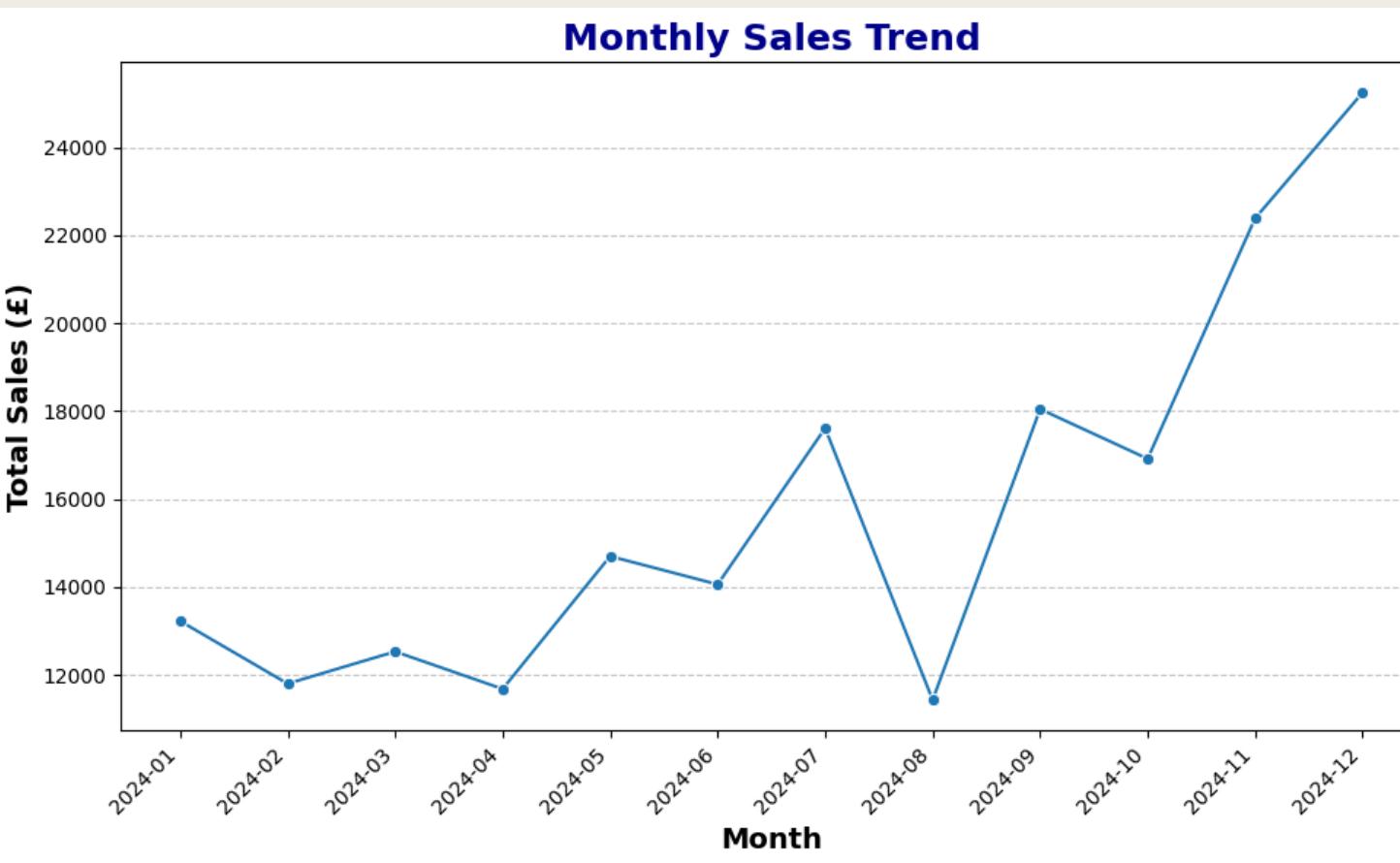


# Revenue & Sales Analysis

**Objective:** Analyze monthly sales trends and sales distribution by city to understand seasonal demand patterns and geographic performance.

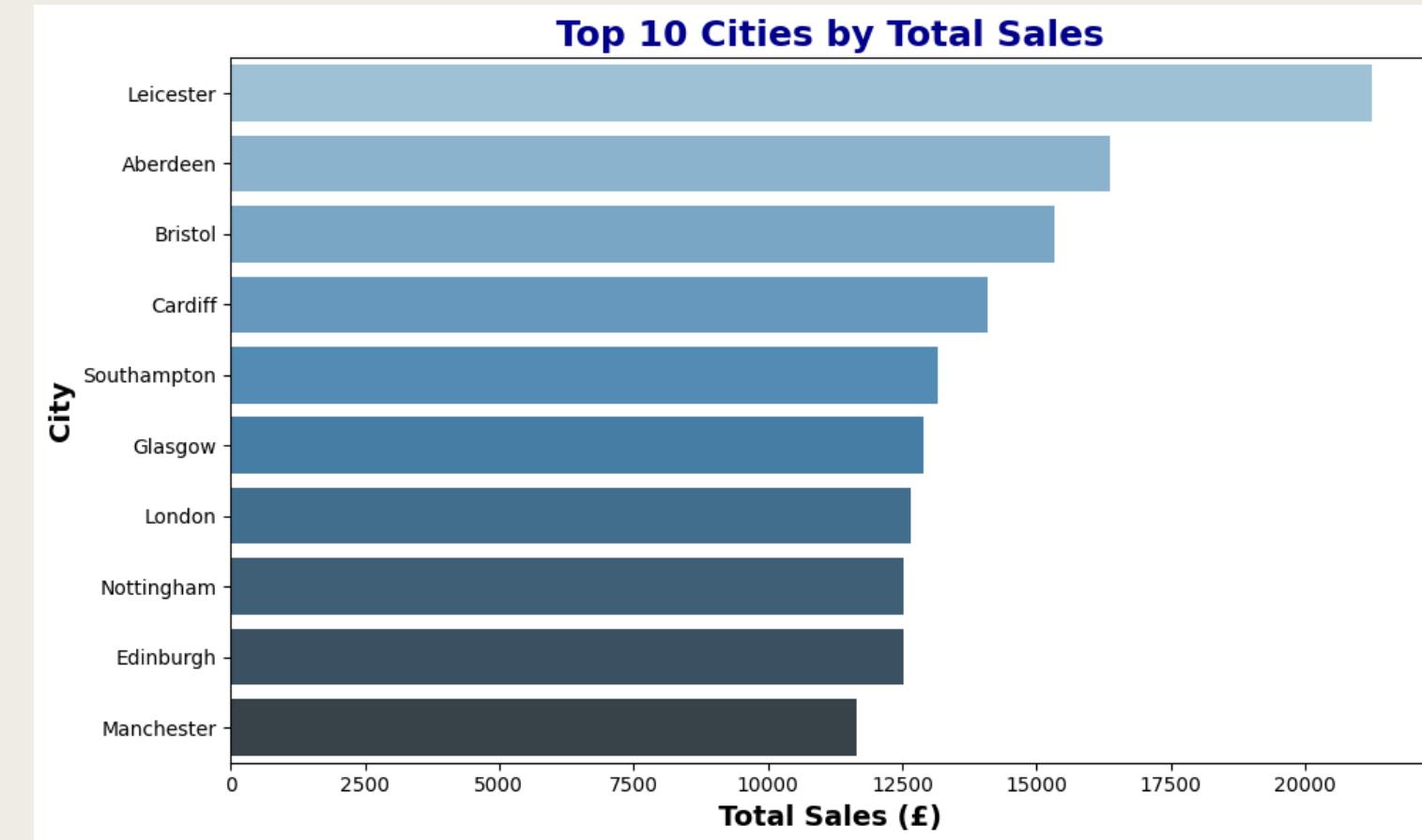
## Sales Trends by Month

Monthly Sales Trend



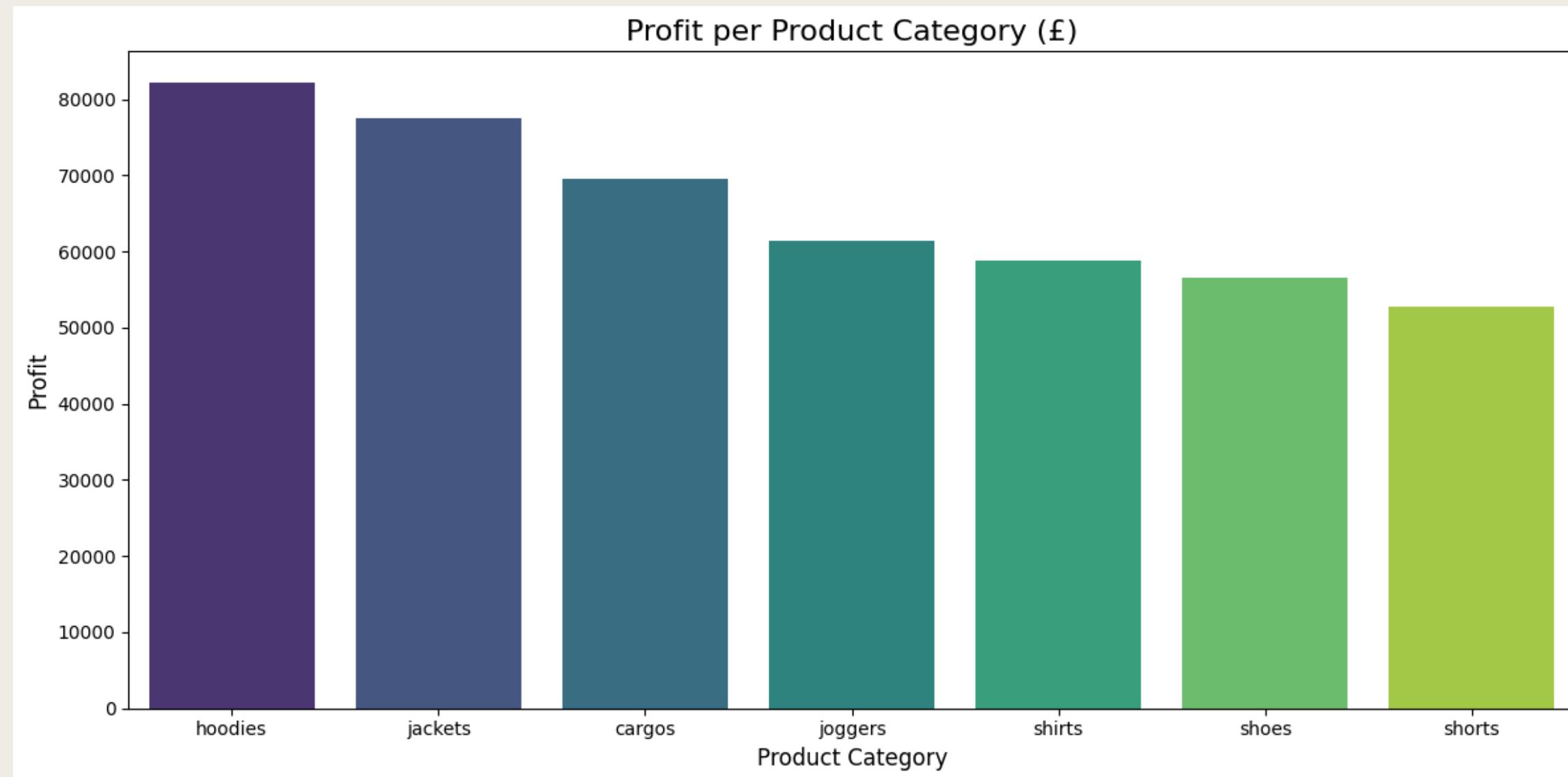
## Sales Breakdown by City

Top 10 Cities by Total Sales



# Profit Analysis Per Product Category

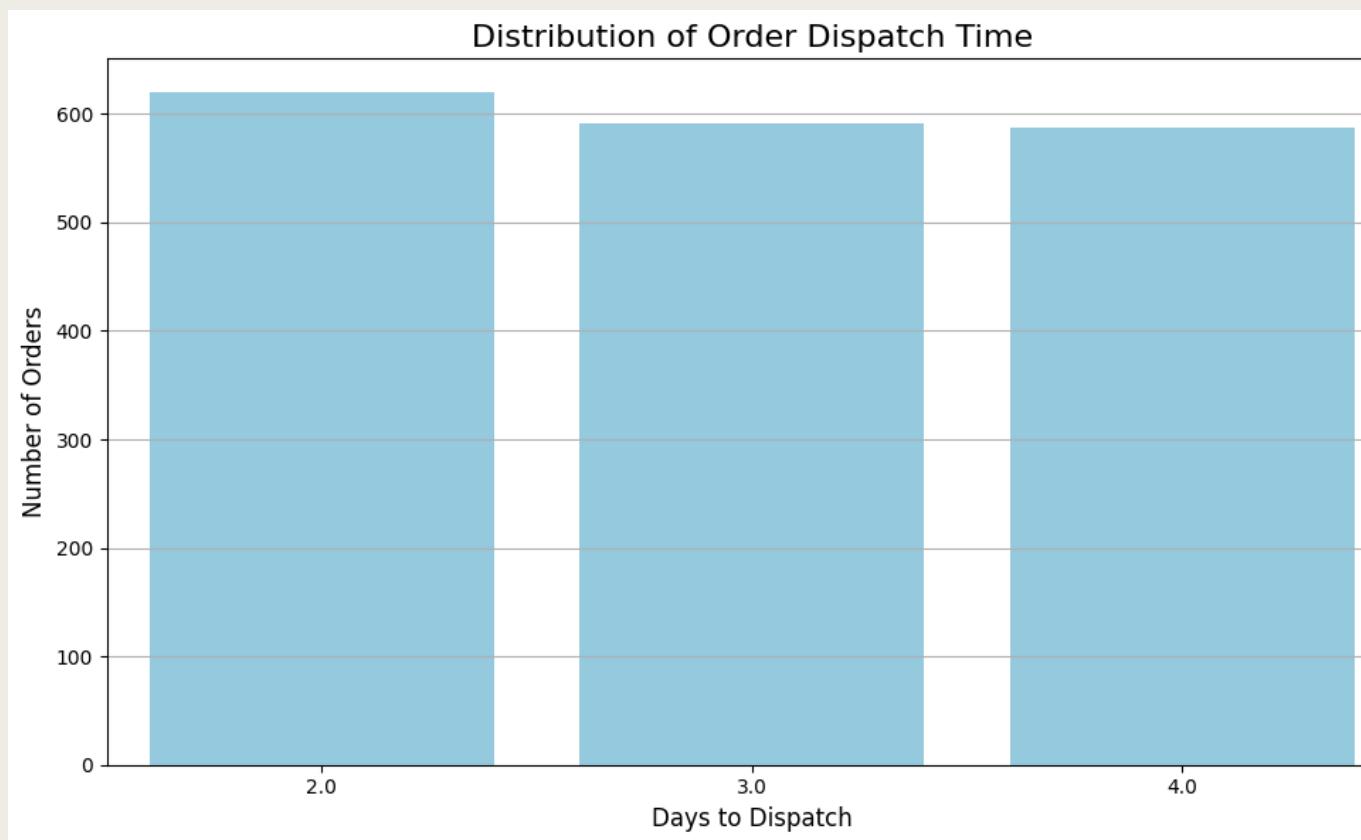
**Objective:** Analyze the profitability of suppliers to identify top contributors to revenue.



# Operational Efficiency Analysis

**Objective:** Analyze order processing times and order statuses to improve fulfillment efficiency and order management.

## Order Processing Time



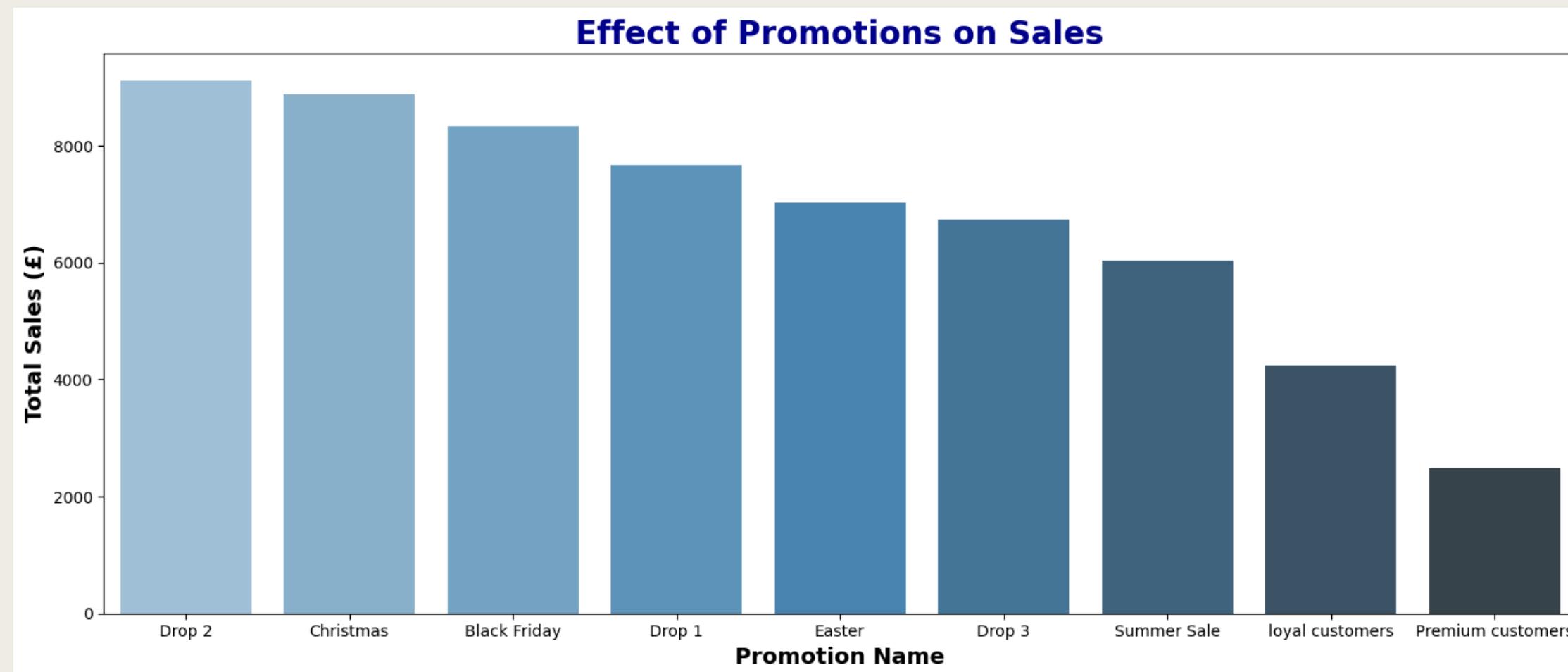
## Order Status



# Marketing & Promotions Analysis

**Objective:** Evaluate the effectiveness of discounts and promotions on sales performance.

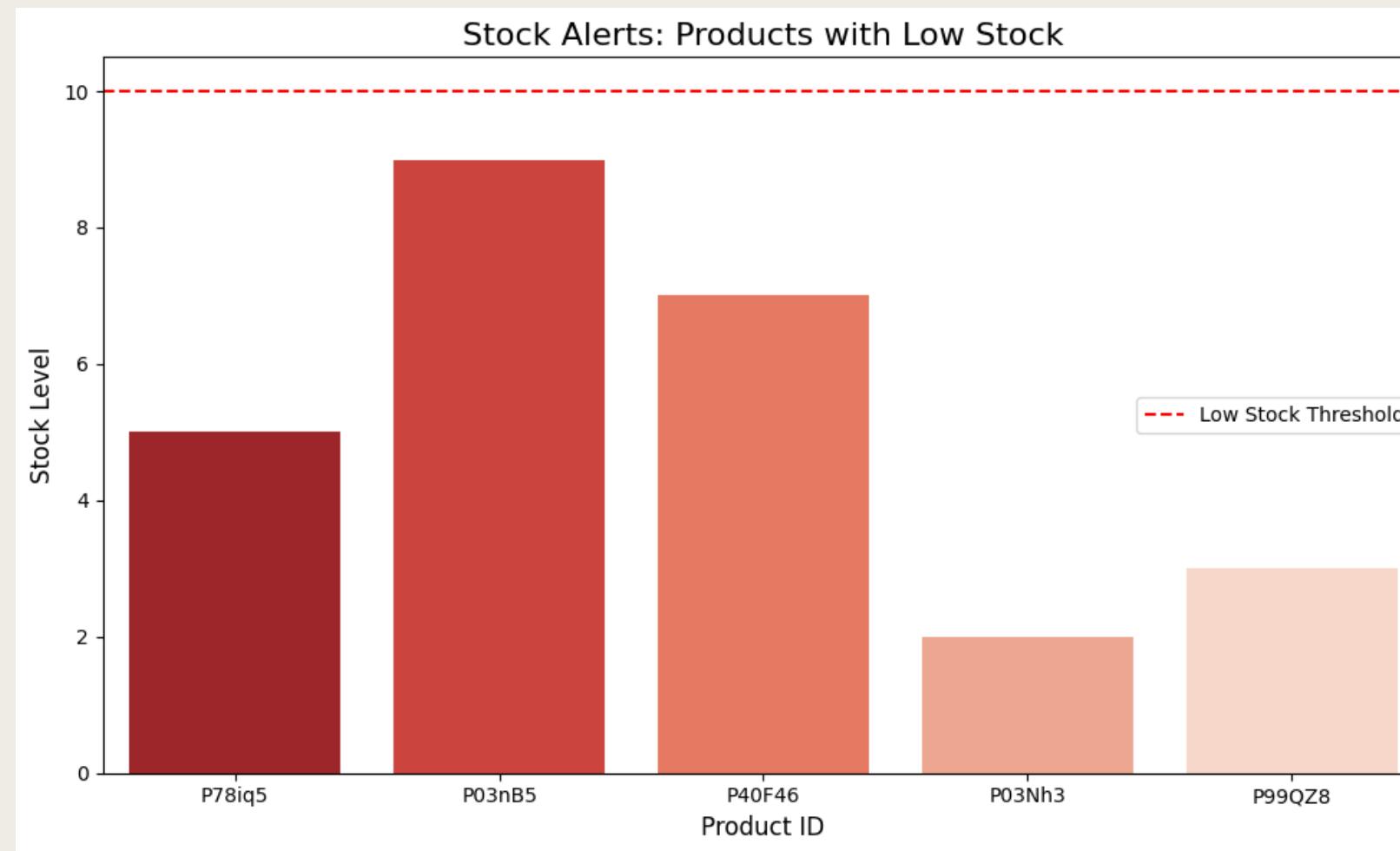
## Effectiveness of Discounts on Sales



# Stock & Inventory Analysis

**Objective:** Monitor inventory levels to ensure popular products remain in stock and prevent missed sales opportunities.

## Low Stock Products





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# Conclusion & Key Takeaways

# Conclusion

Well-designed data management system

Actionable business intelligence

Competitive in e-commerce market

## Business Impact

### Data-driven

- decision-making across customer relationships
- inventory management
- marketing strategies.

### Structured database

- tracking of orders, promotions, and supplier performance
- efficient business operations

## Key Insights

### Optimized Inventory Management

- Prevent stockouts
- Excess inventory

### Enhanced Customer Engagement

- Promotions
- Personalized marketing

### Revenue Growth Opportunities

- Sales trends
- Strategic promotions

## Future Considerations

### Implement Real-Time Analytics

Live dashboards to monitor key metrics instantly.

### Automate Inventory Restocking

AI-driven alerts to prevent shortages.

### Refine Marketing Campaigns

Utilize purchase behavior data to personalize offers and drive conversions.



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Thank You!