



PRTHE ALLURE OF POTENTIALPHECY

# 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



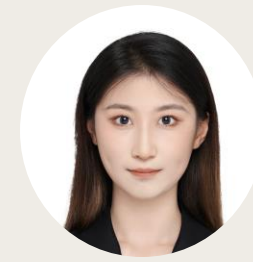
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Project Lead



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Data Analyst



**Musa Vijdani**

Data Analyst



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SQL Developer

# Introduction to Prophecy

## Company Overview

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

## Key Features

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

## Business Model


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

## Challenges Faced

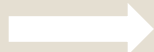
- Inventory Mismanagement
- Delayed Shipments
- Ineffective Promotions

# Core Functions

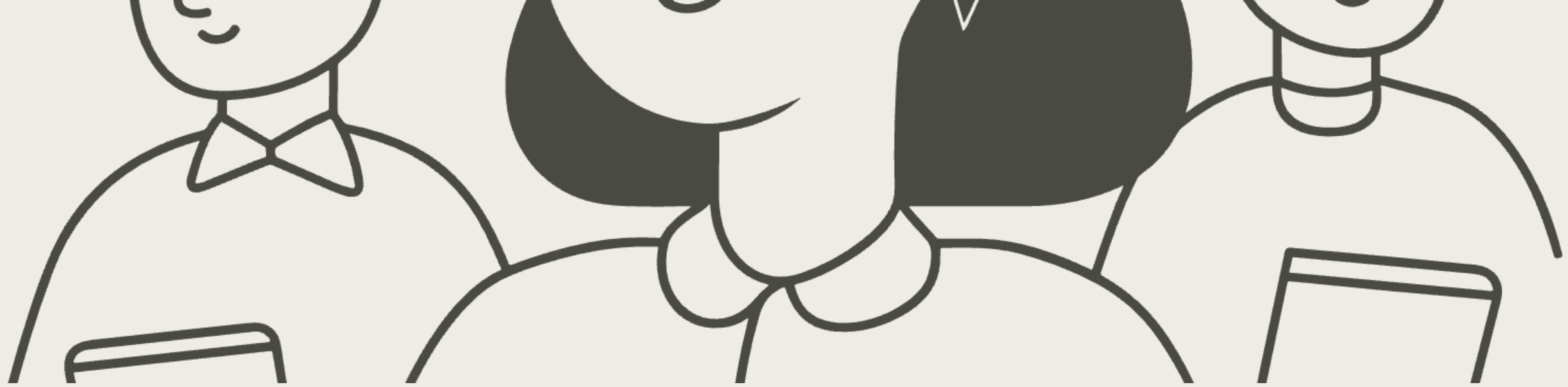
## Customer Relationship Management (CRM)

- 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

## 1 Improve Customer Relationship Management

*Data Needs:* Customer personal details (Name, Email, Phone, Address), Order history, Promotions, Discount usage

1

## 2 Enhance Inventory Tracking & Supply Chain Management

*Data Needs:* Product details (category, price, size, color), Stock levels, Supplier data, Low-stock alerts

2

## 3 Optimize Promotional Campaign Tracking

*Data Needs:* Promotion details (start date, end date, discount rate), Affected customers, Sales uplift

3

## 4 Streamline Logistics & Shipment Management

*Data Needs:* Order-shipment association, Carrier details, Delivery status updates

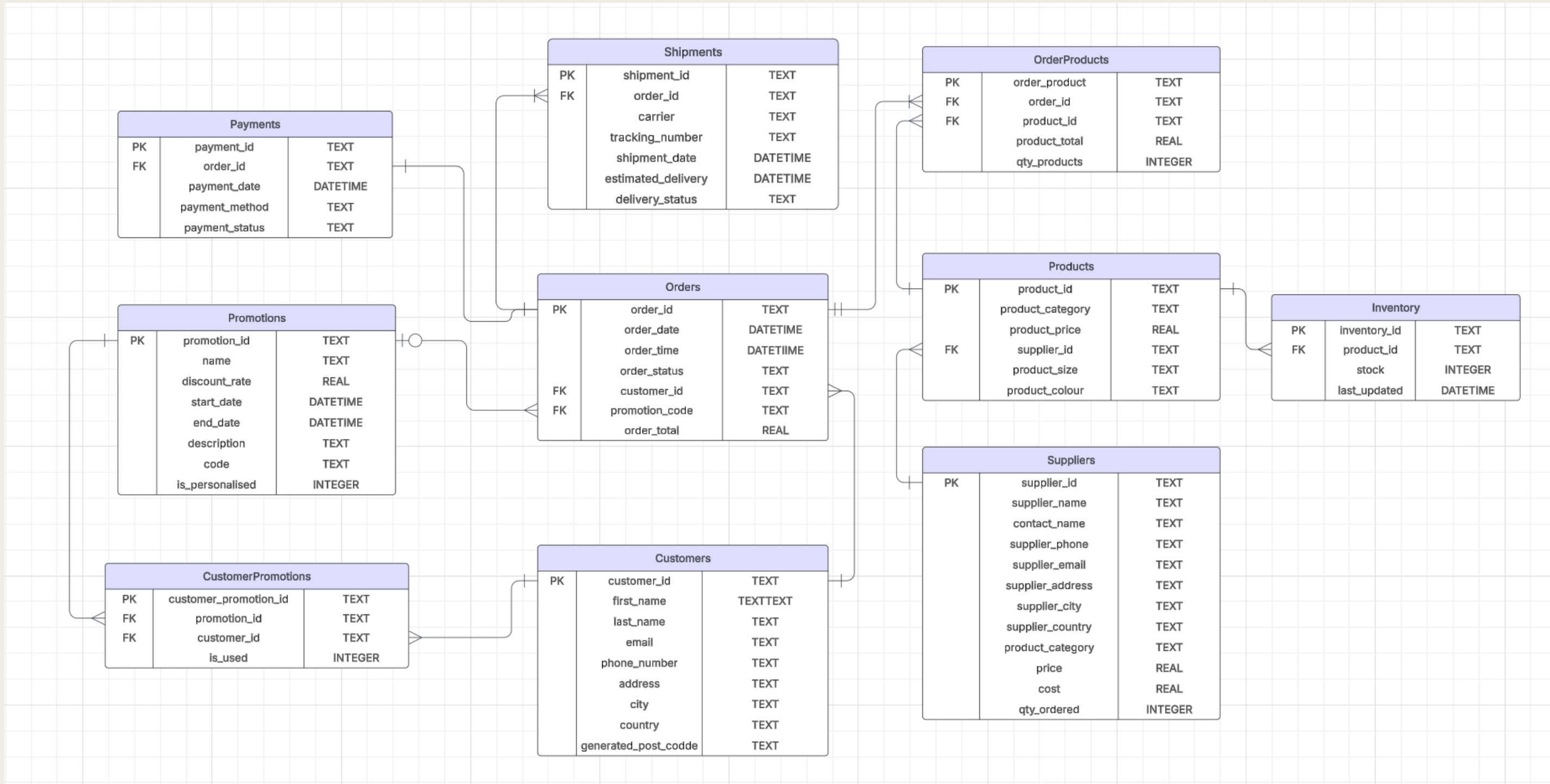
4

## 5 Facilitate Financial Transactions & Payments

*Data Needs:* Payment methods, Order-payment linkage, Refund processing details

5

# ERD Overview





# Data Overview

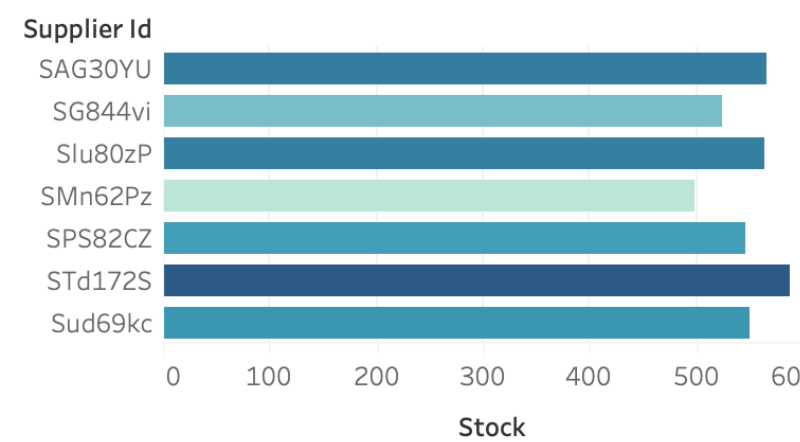
City distribution of customers



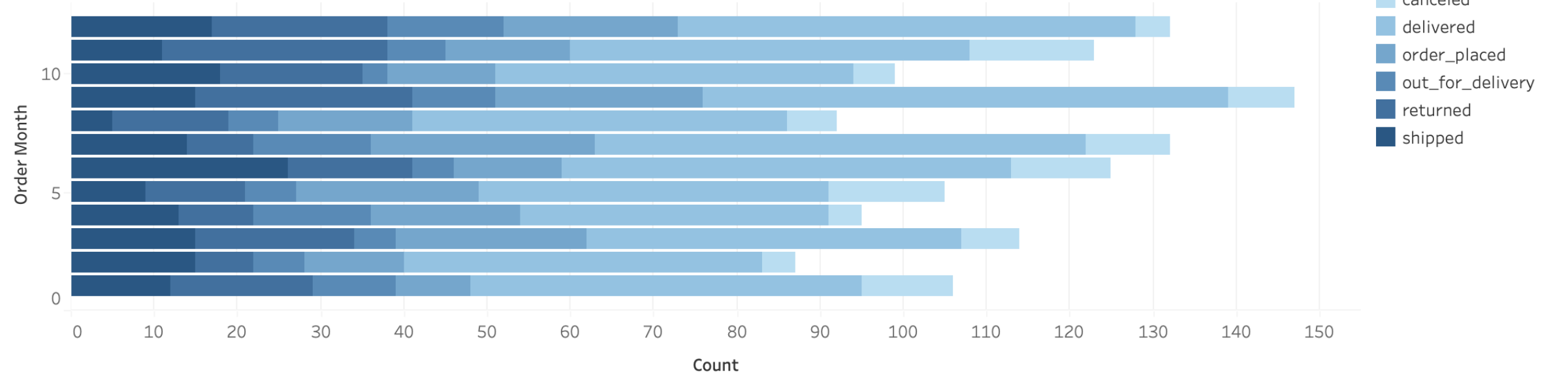
Product Price



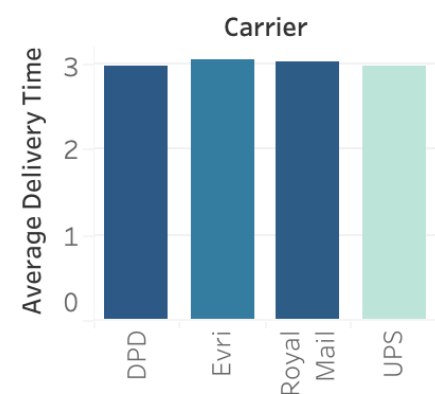
Supplier&Stock



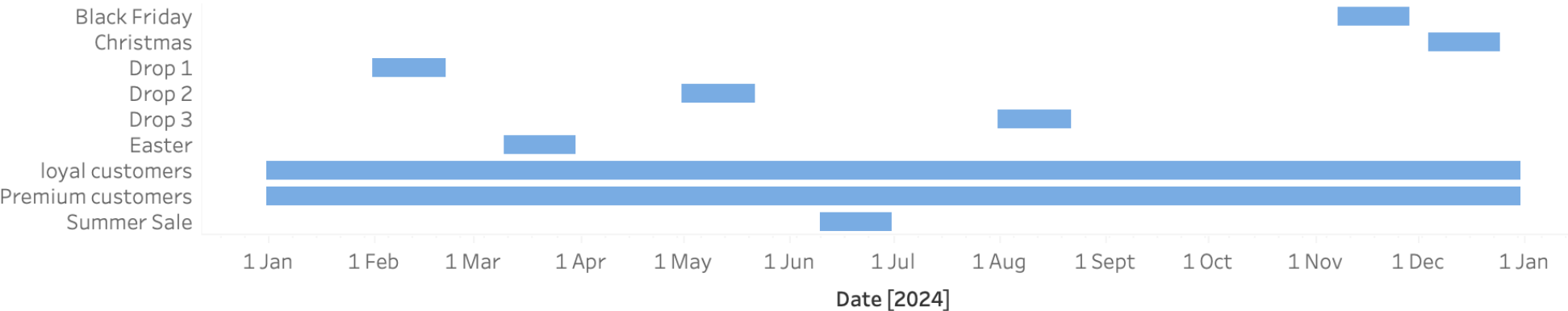
Order



Shipment Efficiency



Stage of Promotion





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# SQL Analysis

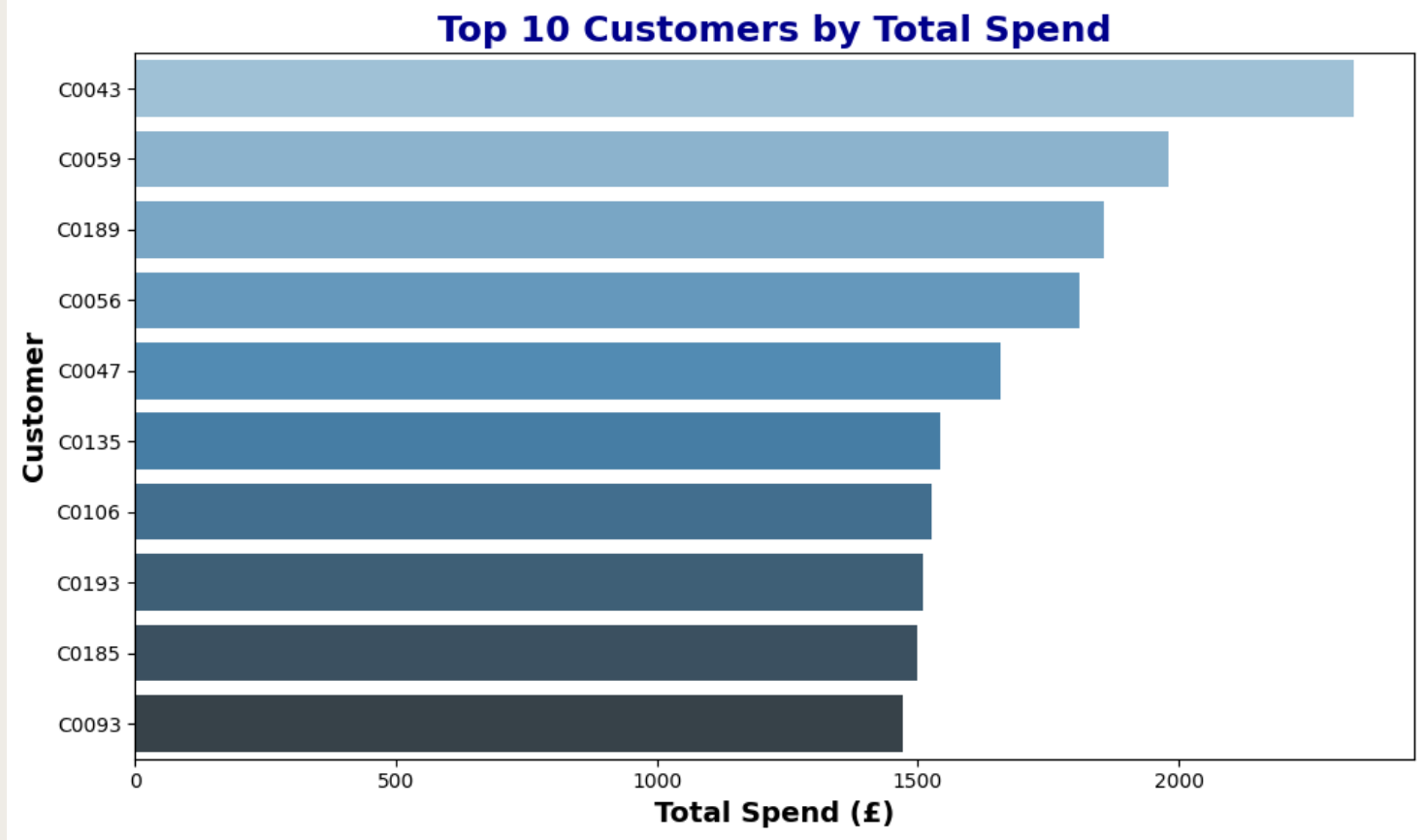
Outputs and Insights

# Customers' Orders Analysis

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

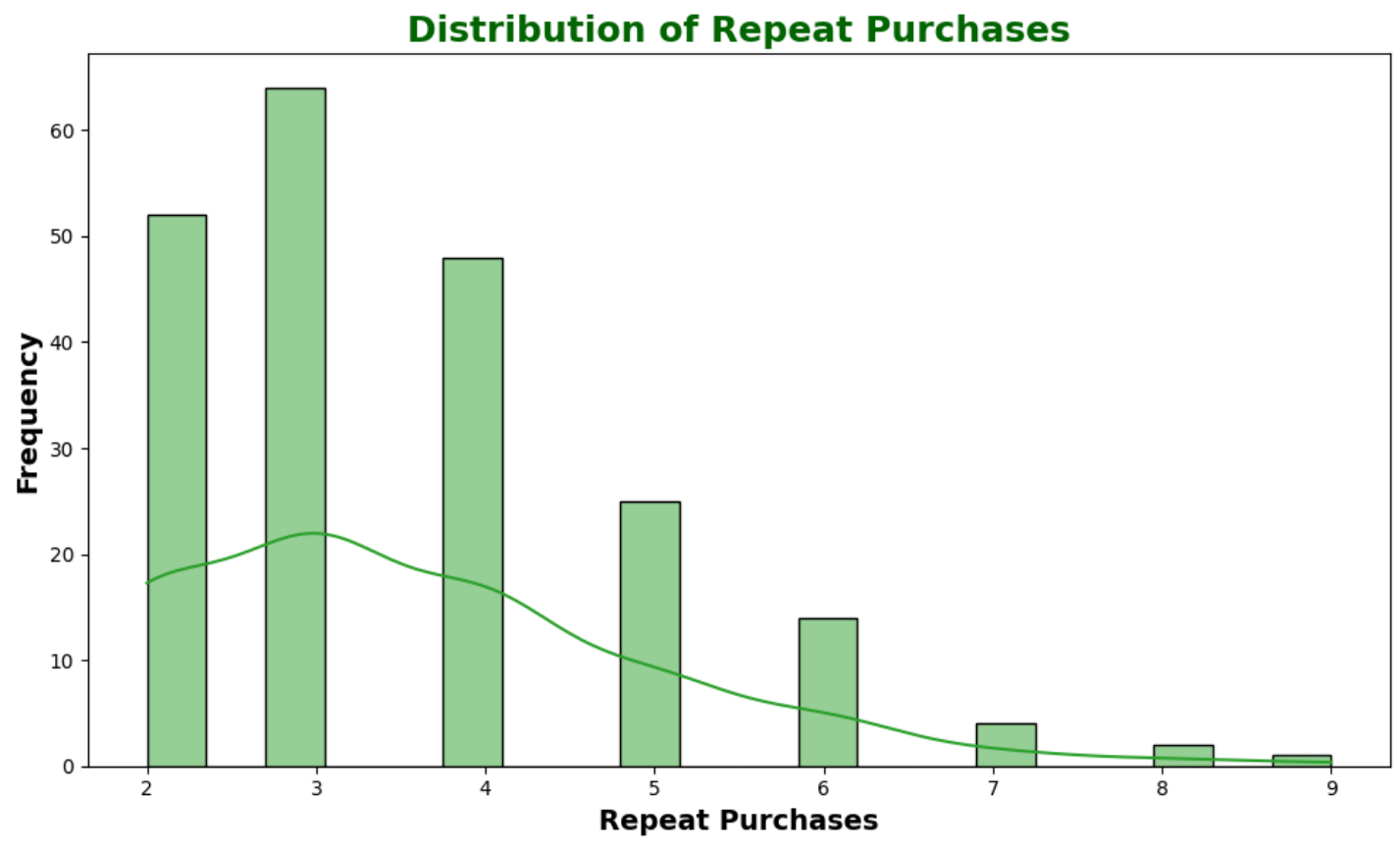
Top Customers

Top 10 Customers by Total Spend



Customer Repeat Purchases

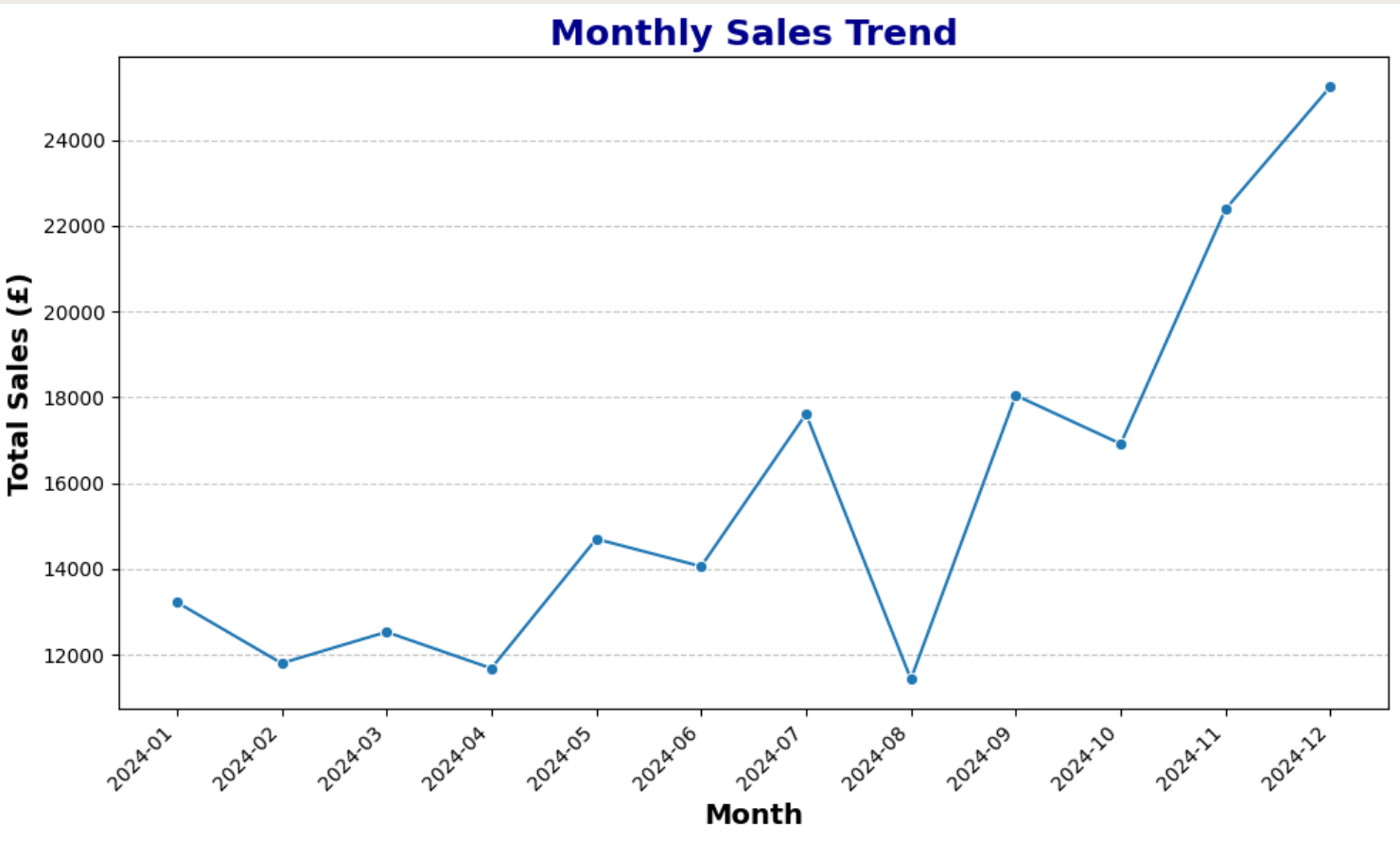
Distribution of Repeat Purchases



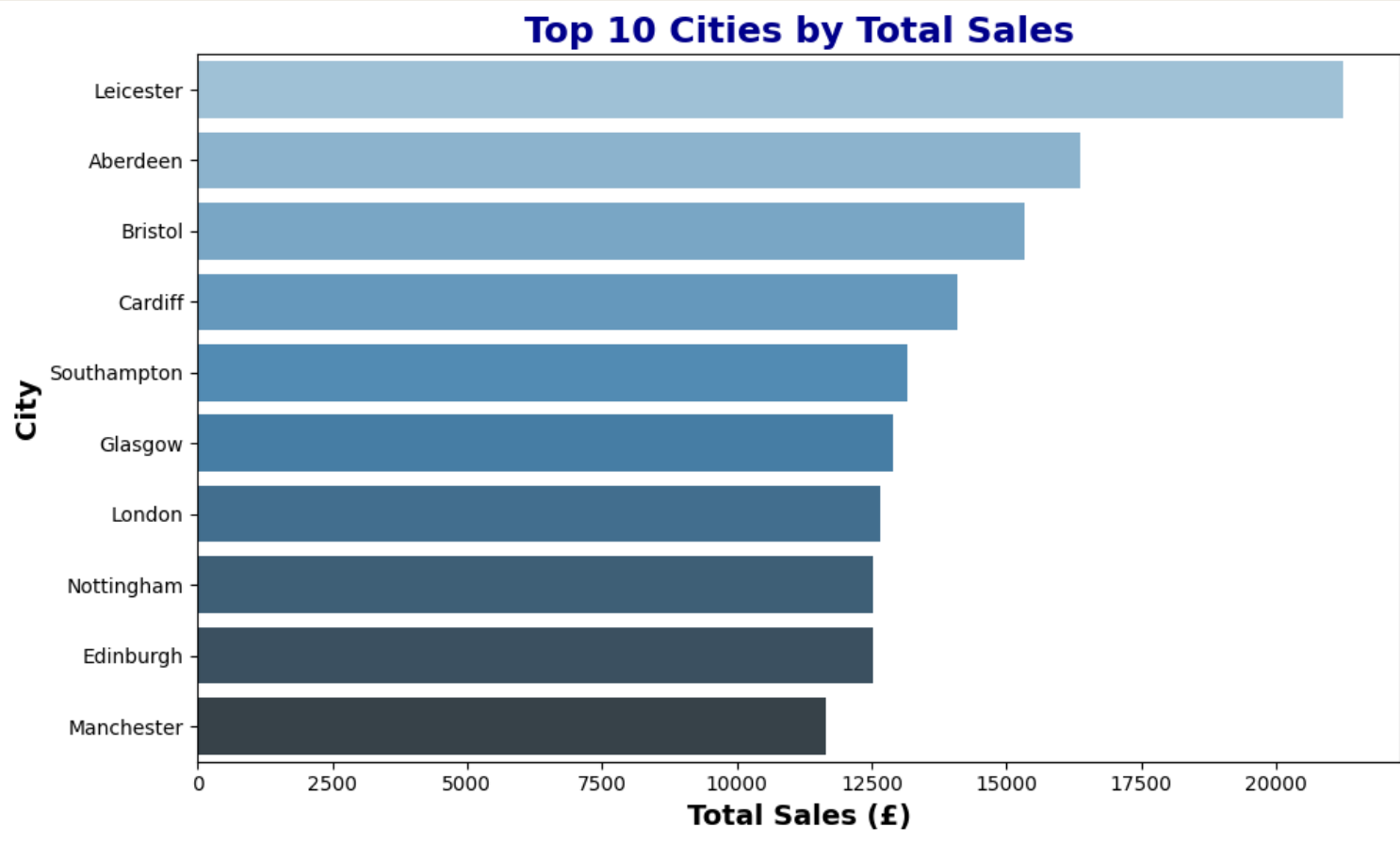
# Revenue & Sales Analysis

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

Sales Trends by Month

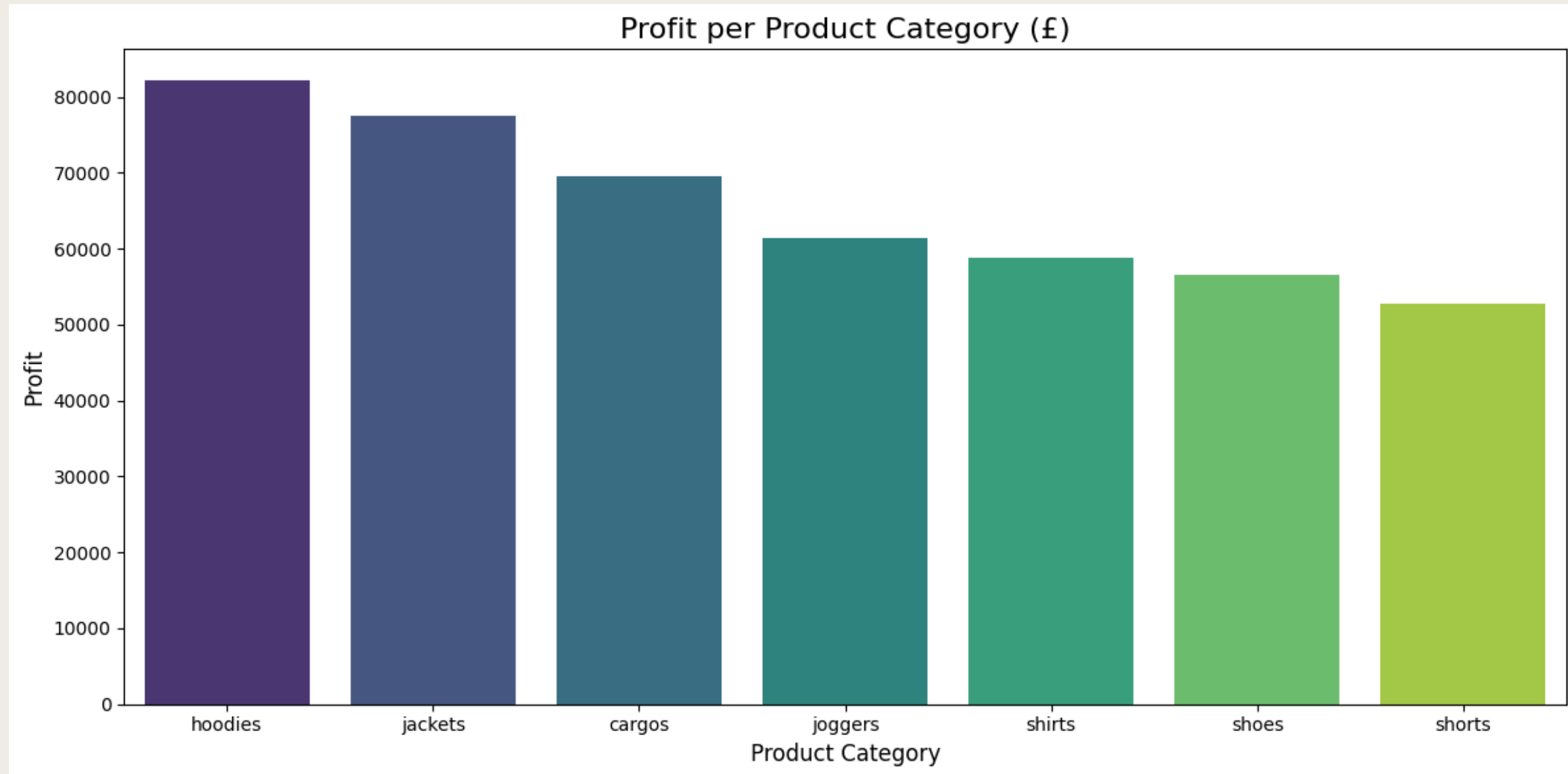


Sales Breakdown by City



# Profit Analysis Per Product Category

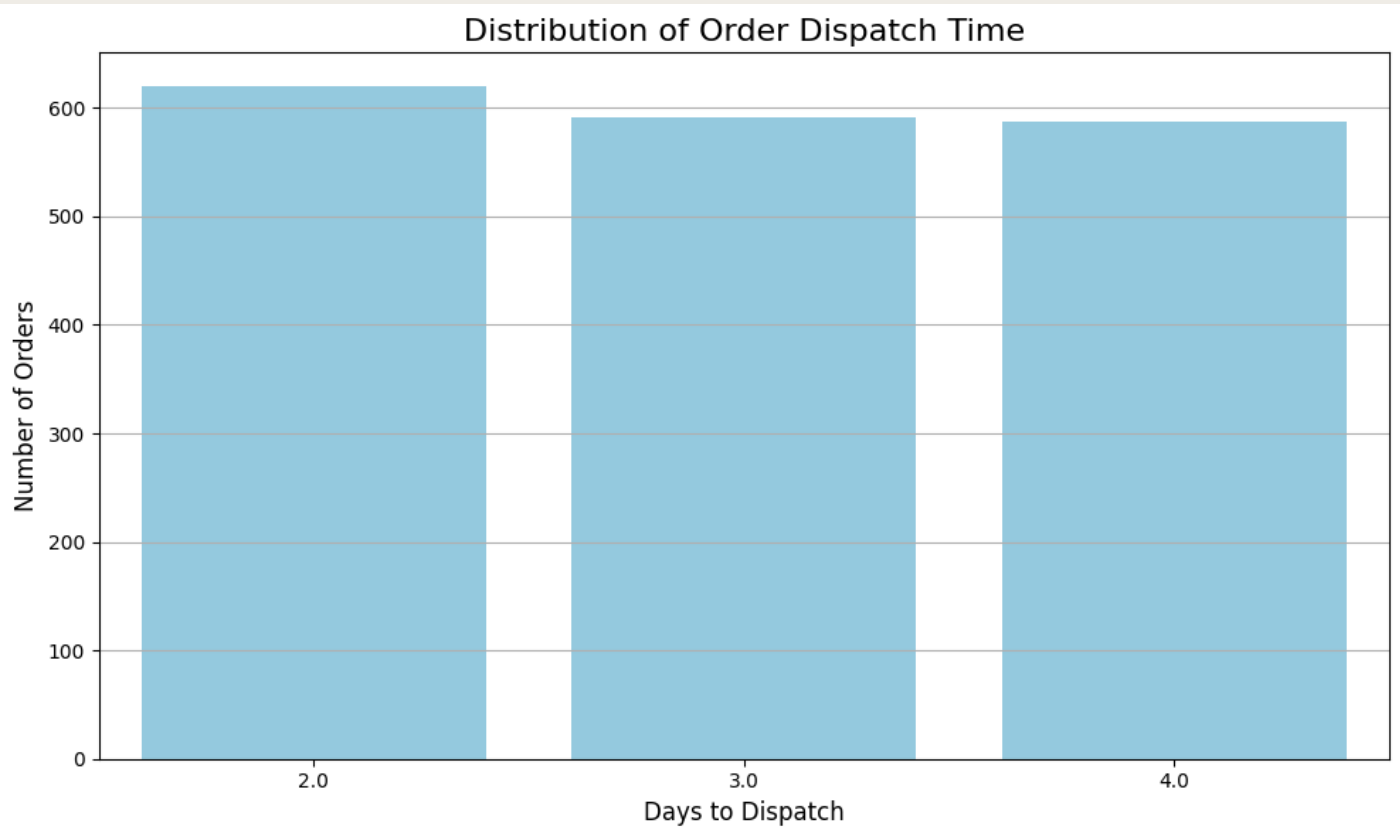
**Objective:** Analyze the profitability of suppliers to identify top contributors to revenue.



# Operational Efficiency Analysis

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

## Order Processing Time



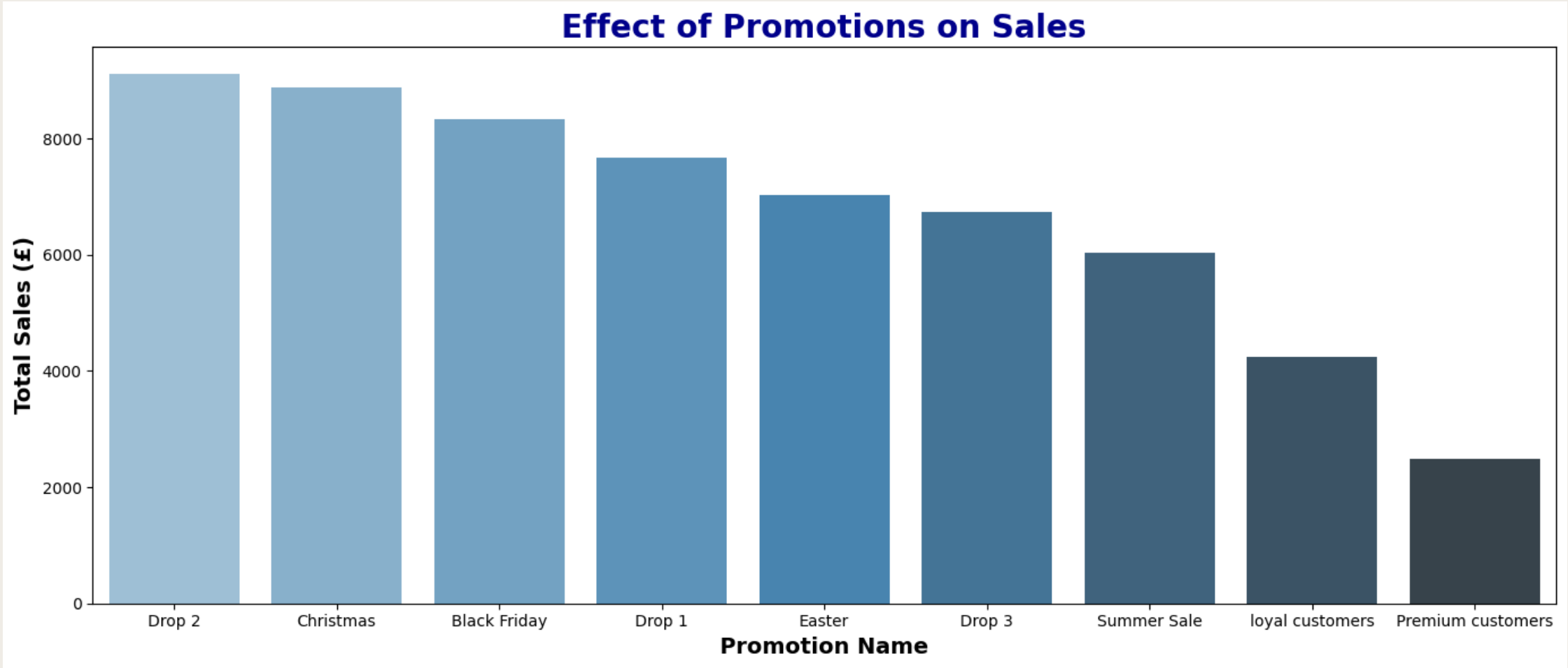
## Order Status



# Marketing & Promotions Analysis

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

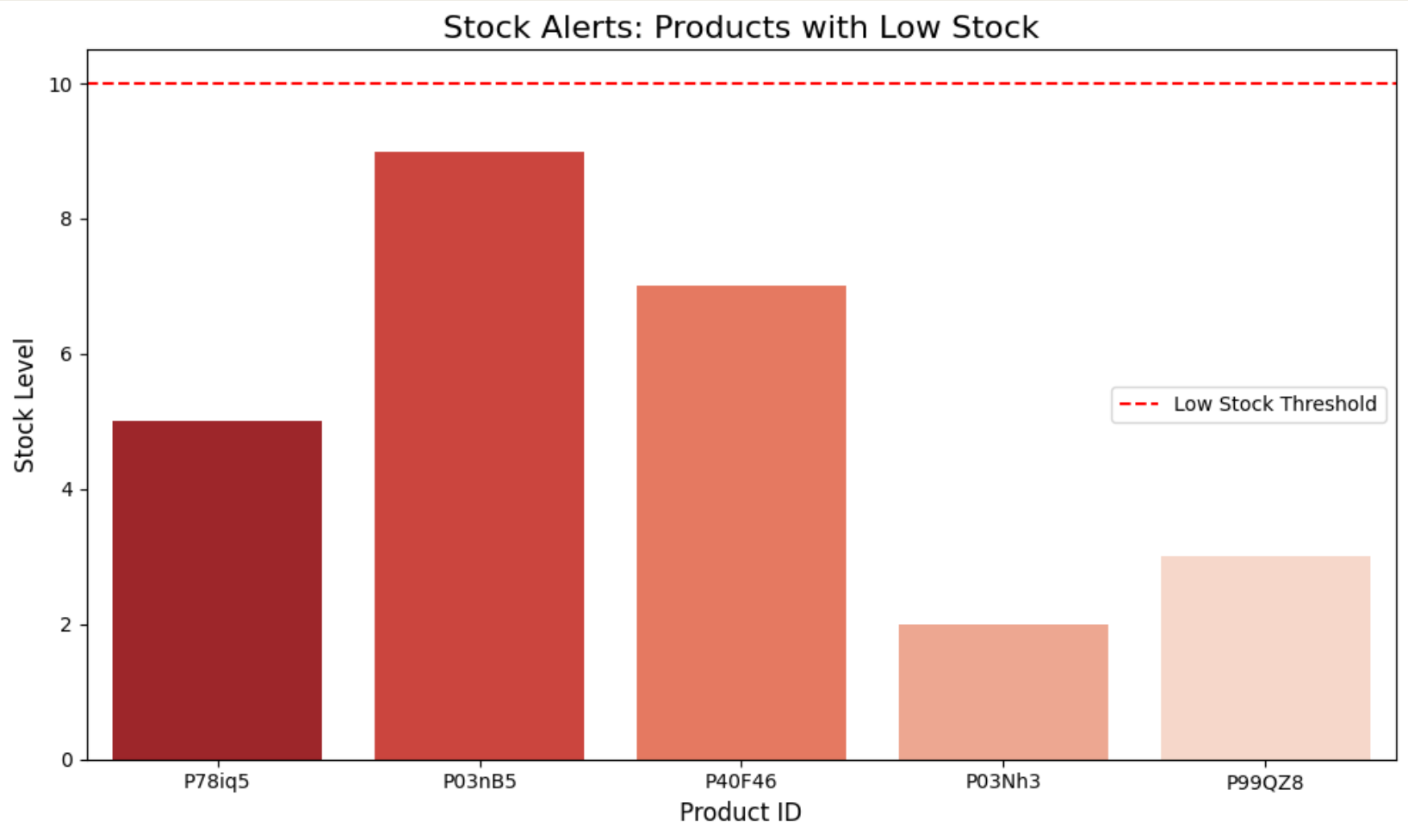
## Effectiveness of Discounts on Sales



# 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!**