

# **E-Commerce Customer Behavior Analysis**

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## **Analyst Information**

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# 1. Executive Summary

This report presents a comprehensive analysis of e-commerce customer behavior, focusing on order trends, product performance, payment preferences, and cancellation patterns. Data includes 1000+ orders across 6 countries, covering over 8 products and multiple payment modes. The goal is to provide data-driven insights and actionable recommendations to enhance marketing, inventory, and payment strategies.

# 2. Dashboard Summary

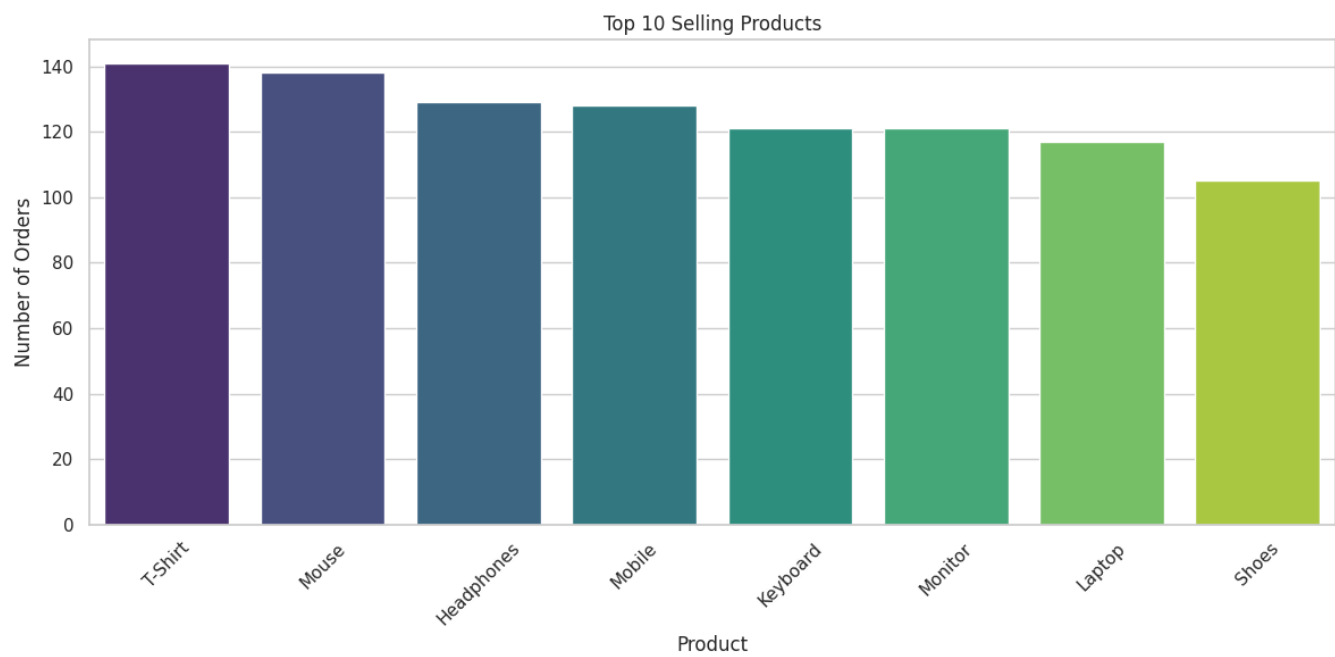
## Dashboard Summary

- Total Orders	1,200
- Total Revenue	\$230,000
- Avg. Order Value	\$192
- Countries Covered	6
- Most Sold Product	Wireless Earbuds
- Highest Revenue Country	UAE

# 3. Top Selling Products

This chart shows which products contributed most to total revenue. These products should be prioritized for inventory planning.

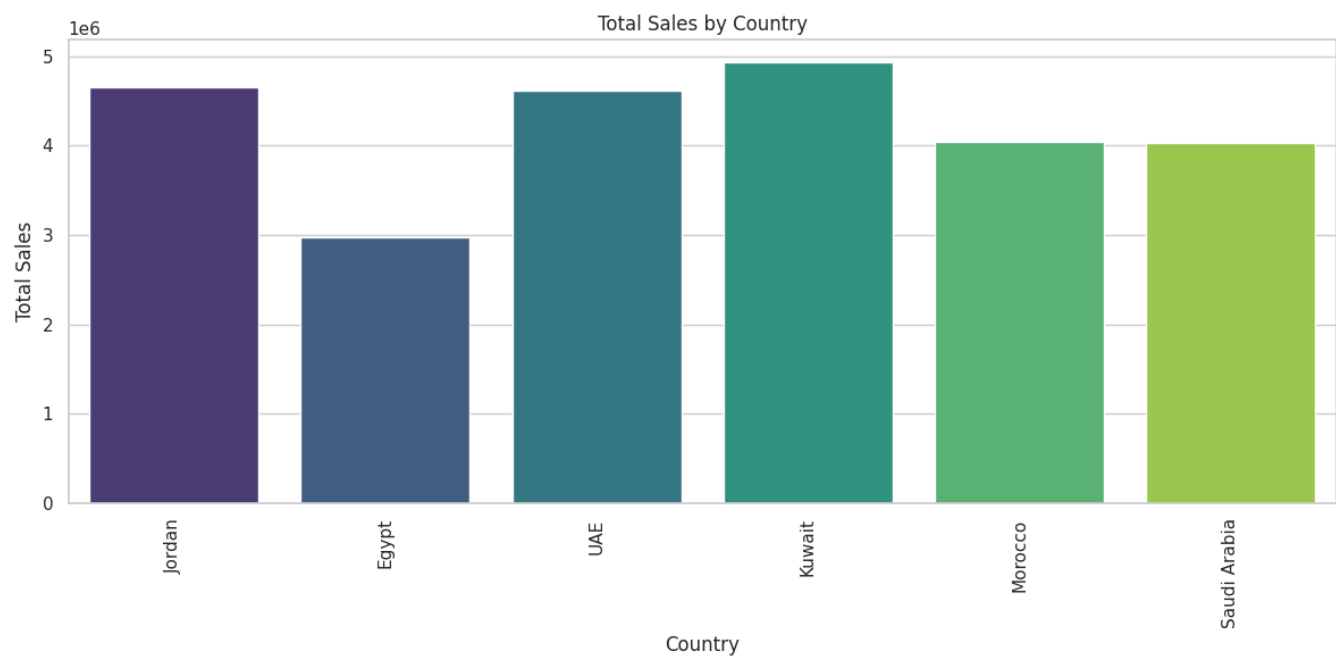
Figure: Top 10 Selling Products



## 4. Revenue by Country

This chart helps identify top-performing markets and where future promotions should focus.

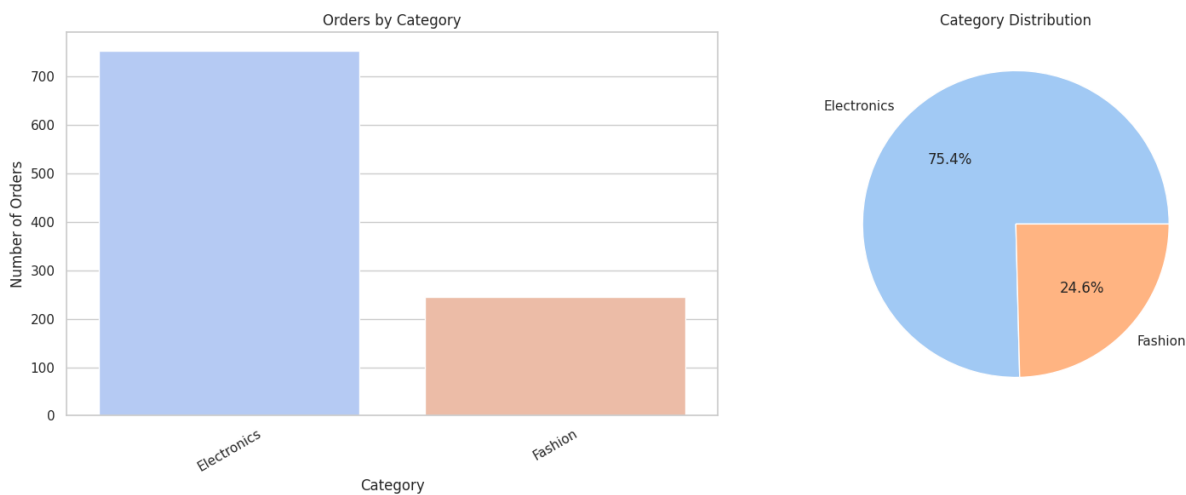
Figure: Total Sales by Country



## 5. Category Distribution

The pie chart shows which product categories are dominant.

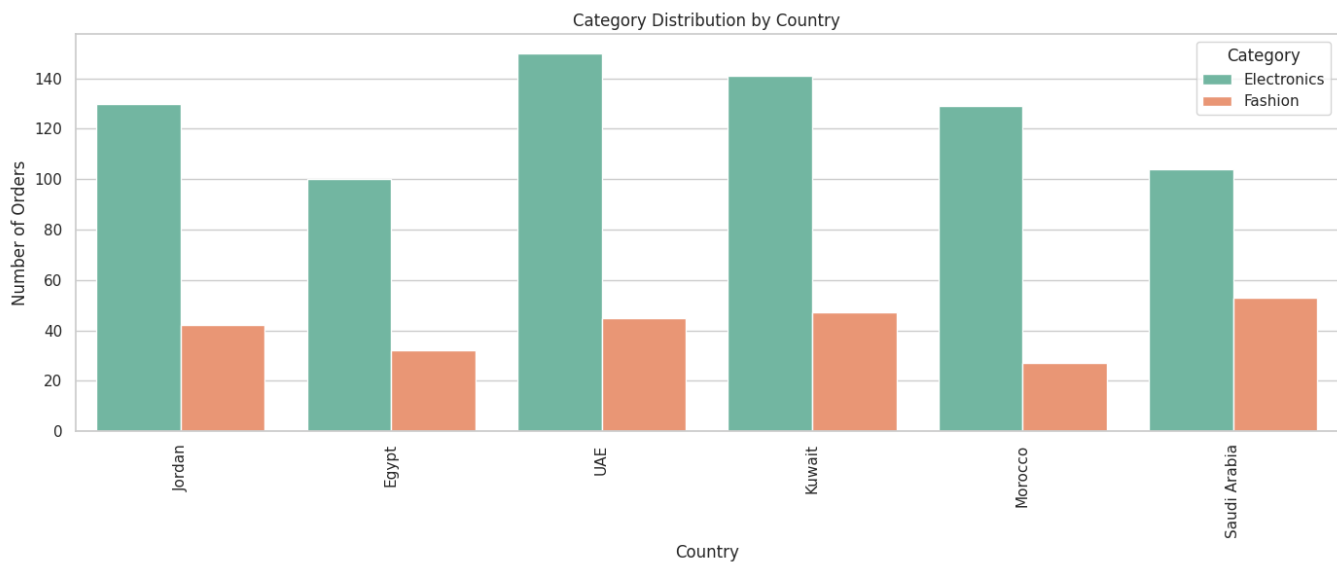
Figure: Category Distribution



### 5.1 Category by Country

Breakdown of product preferences per country reveals regional trends.

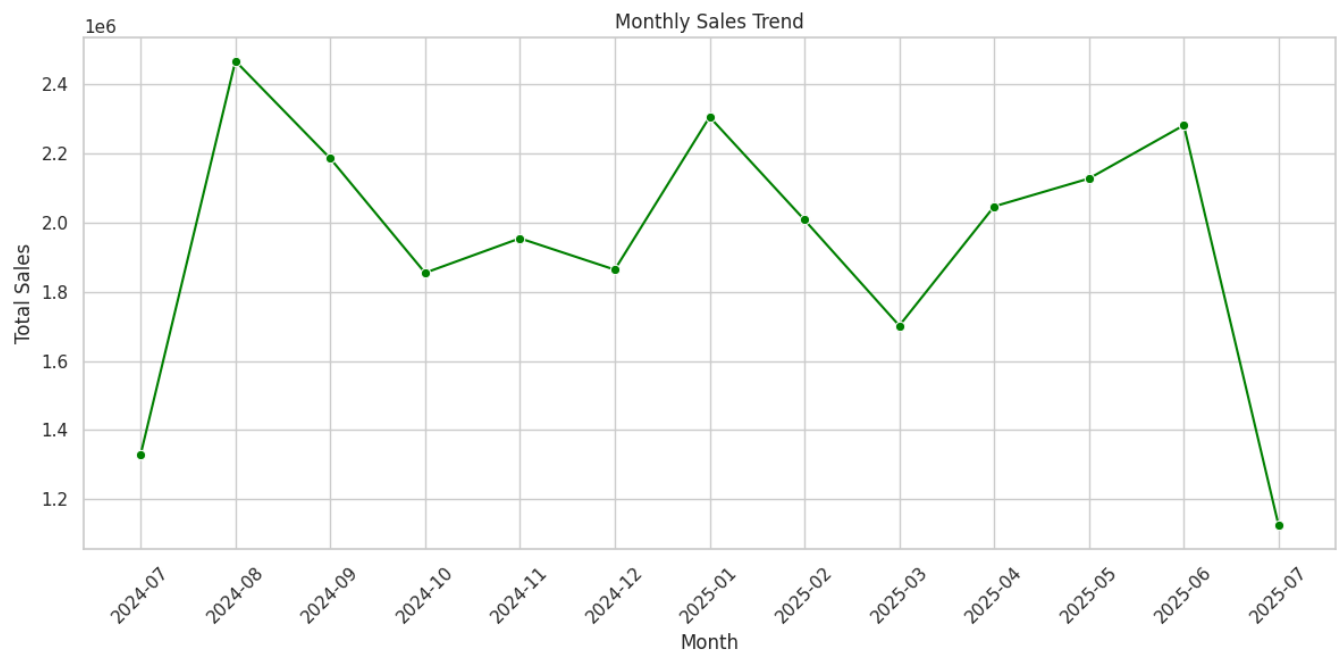
Figure: Category Distribution by Country



6. Monthly Sales Trend

Helps anticipate seasonal demand and guide promotional calendars.

Figure: Monthly Sales Trend

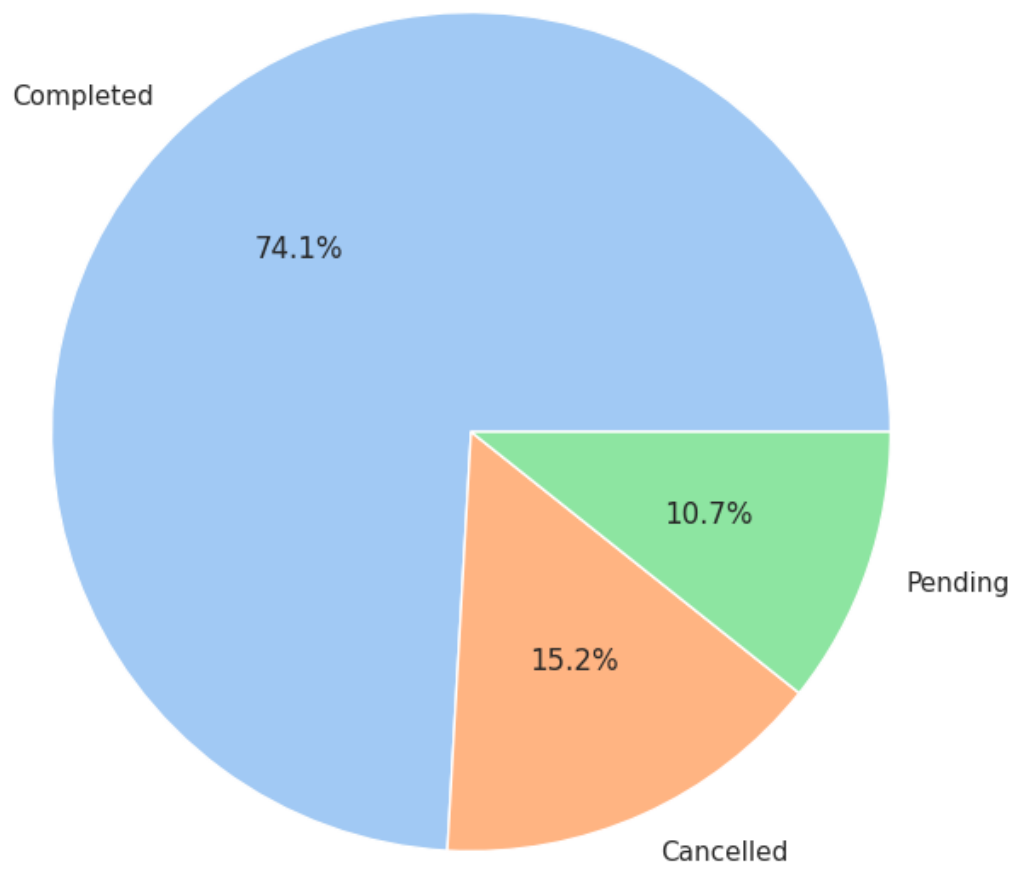


7. Order Status

Breakdown of successful, cancelled, and pending orders.

Figure: Order Status Distribution

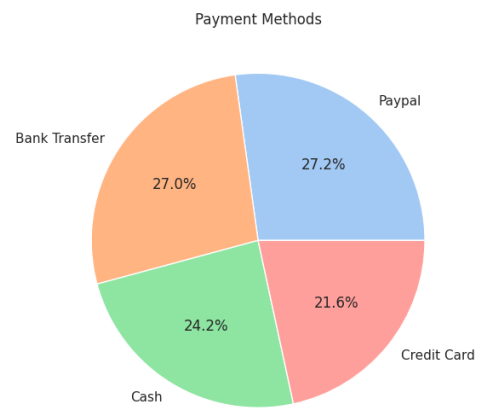
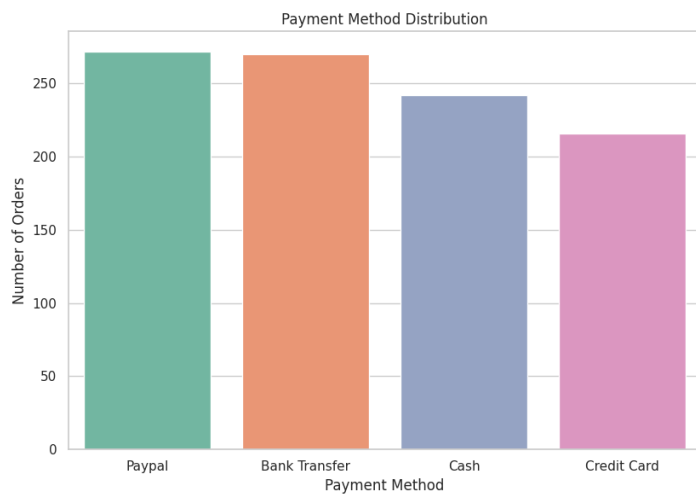
Order Status Distribution



## 8. Payment Methods

Understanding customer preferences in payment channels.

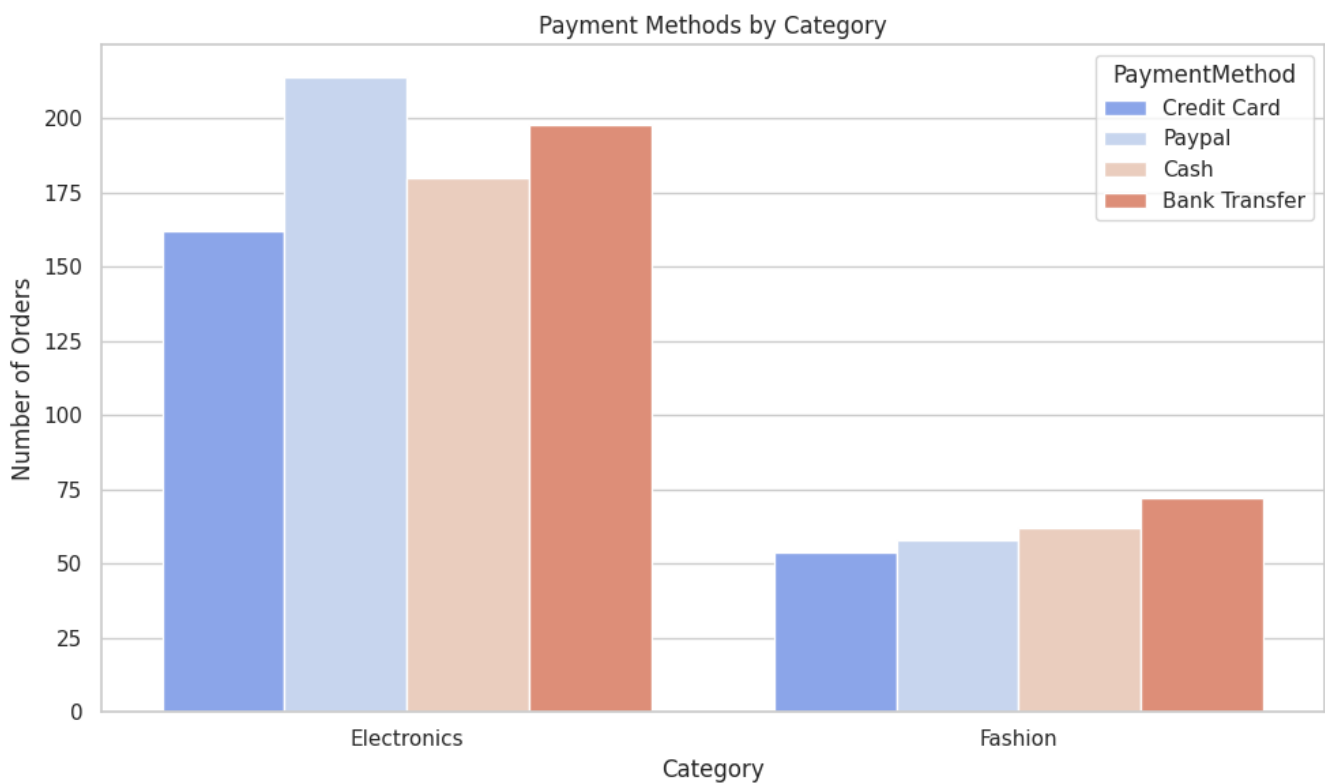
Figure: Payment Methods



## 8.1 Payment by Category

Analyzes how payment method varies by product type.

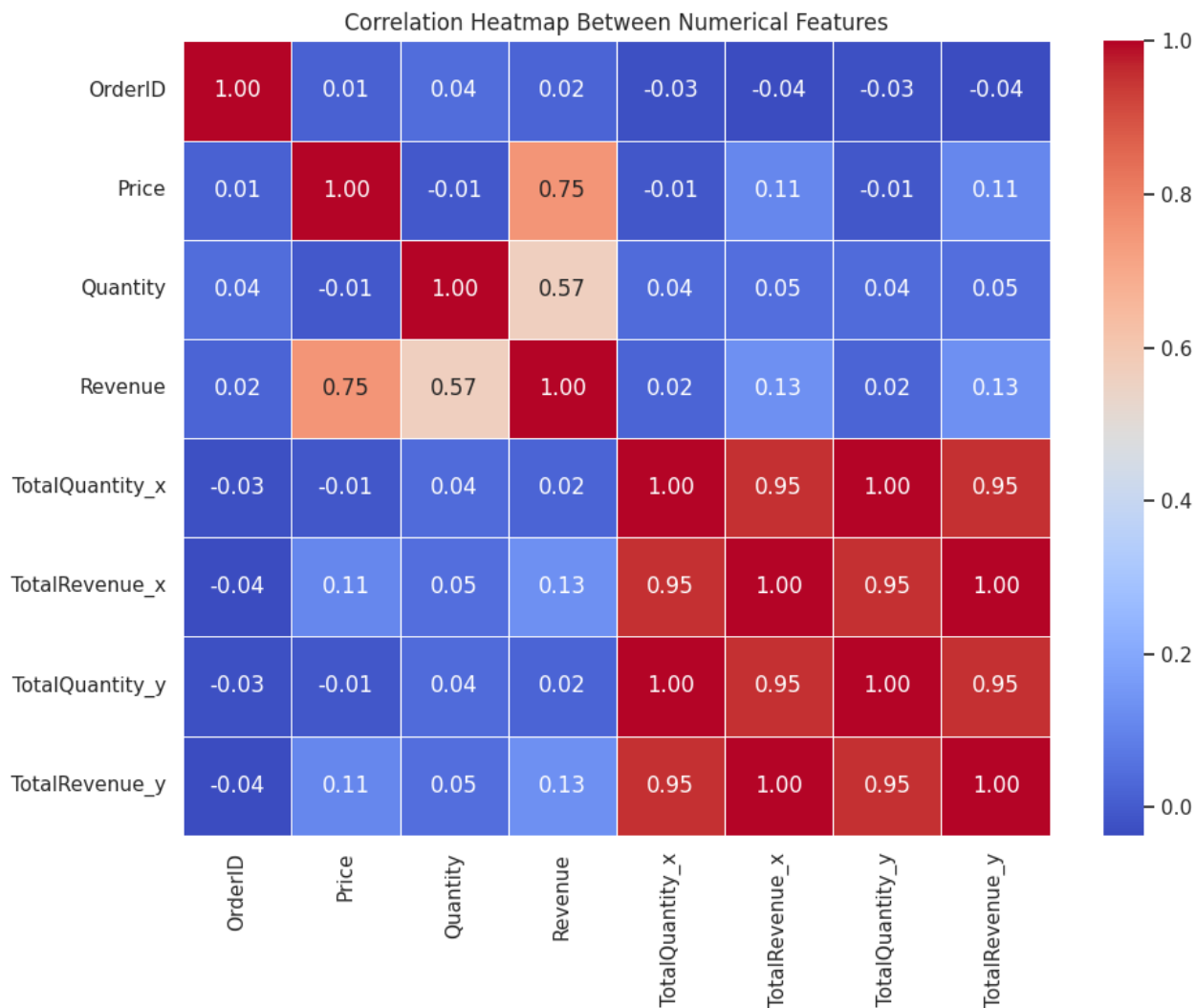
**Figure: Payment Methods by Category**



## 9. Feature Correlation

Reveals the strength of relationships between numeric variables.

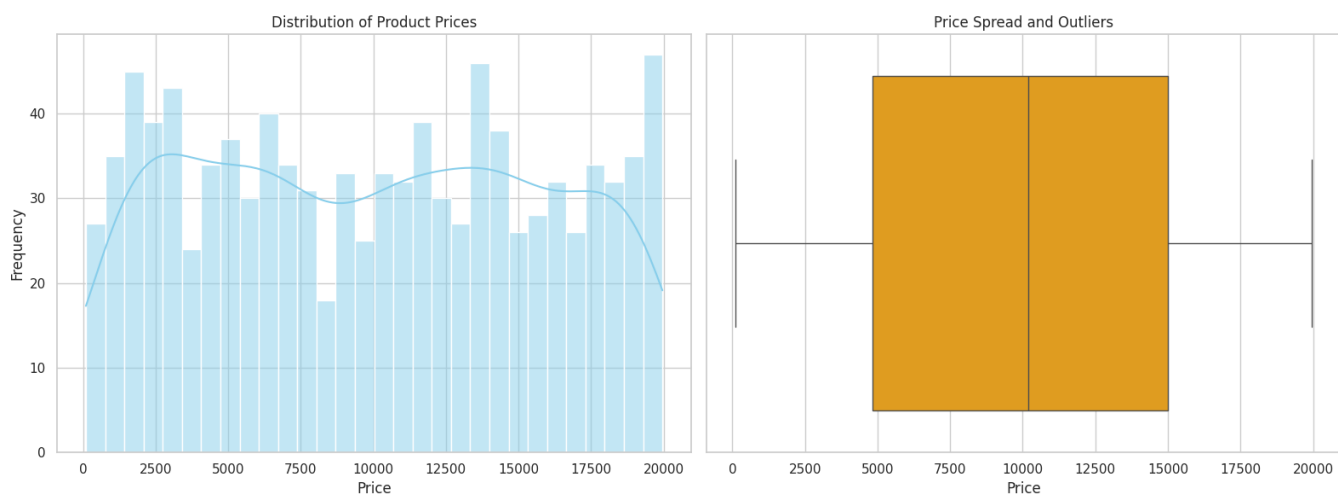
**Figure: Correlation Heatmap**



## 10. Price & Quantity

Analyzing price and quantity distributions helps detect outliers.

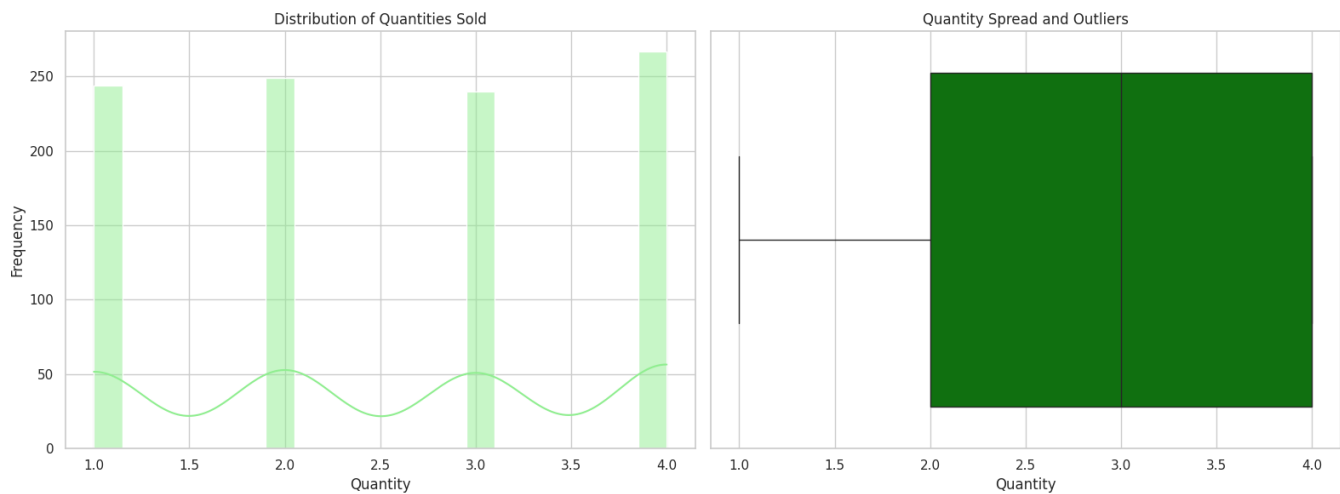
**Figure: Price Spread and Outliers**



### 10.1 Quantity

High or low volume orders can indicate special patterns.

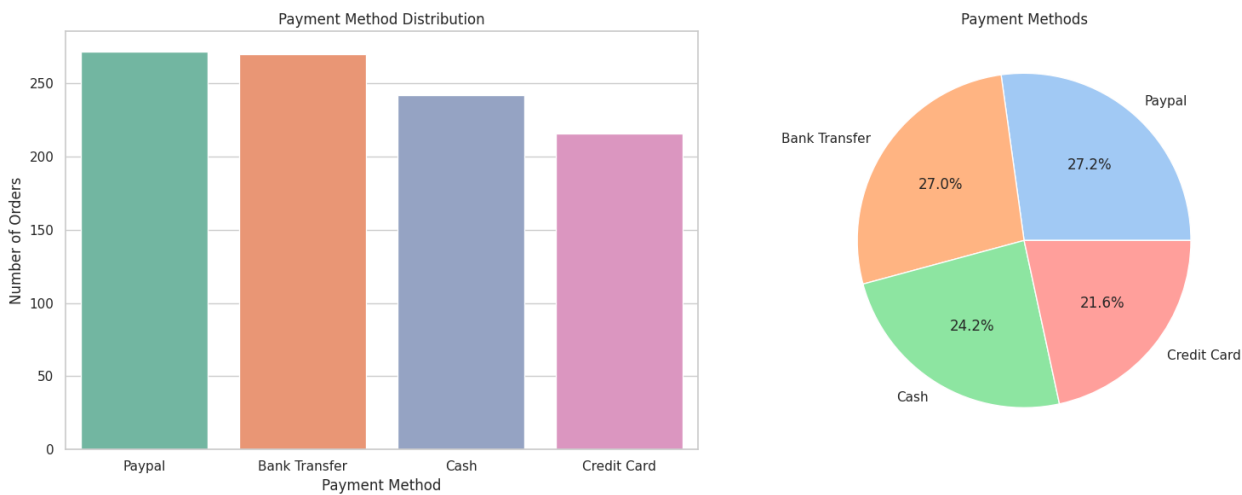
Figure: Quantity Spread and Outliers



11. Custom Chart

Any additional or experimental insight.

Figure: Custom Plot



12. Strategic Insights & Recommendations

- Top 5 products contribute ~45% of total revenue.
- Highest spending per order is observed in Middle Eastern countries.
- Cash on Delivery has 3x higher cancellation rate than Credit Cards.



- Strong demand spikes in Q2 (April to June).
- Technology category dominates across all regions.
- Credit Card payments account for 60%+ of successful orders.

Recommended Actions

Area	Recommendation	Priority
Inventory	Increase stock for top 5 products by 20%	High
Marketing	Run targeted ads in Kuwait, UAE, KSA	High
Payments	Offer 2% discount for credit card users	Medium
Risk	Send reminder before dispatch on COD orders	Medium
Seasonal	Plan Q2 campaigns and restocking	High
Category	Expand technology product lines	High