



E-Commerce Sales Analysis

A comprehensive SQL project to extract insights from e-commerce sales data.

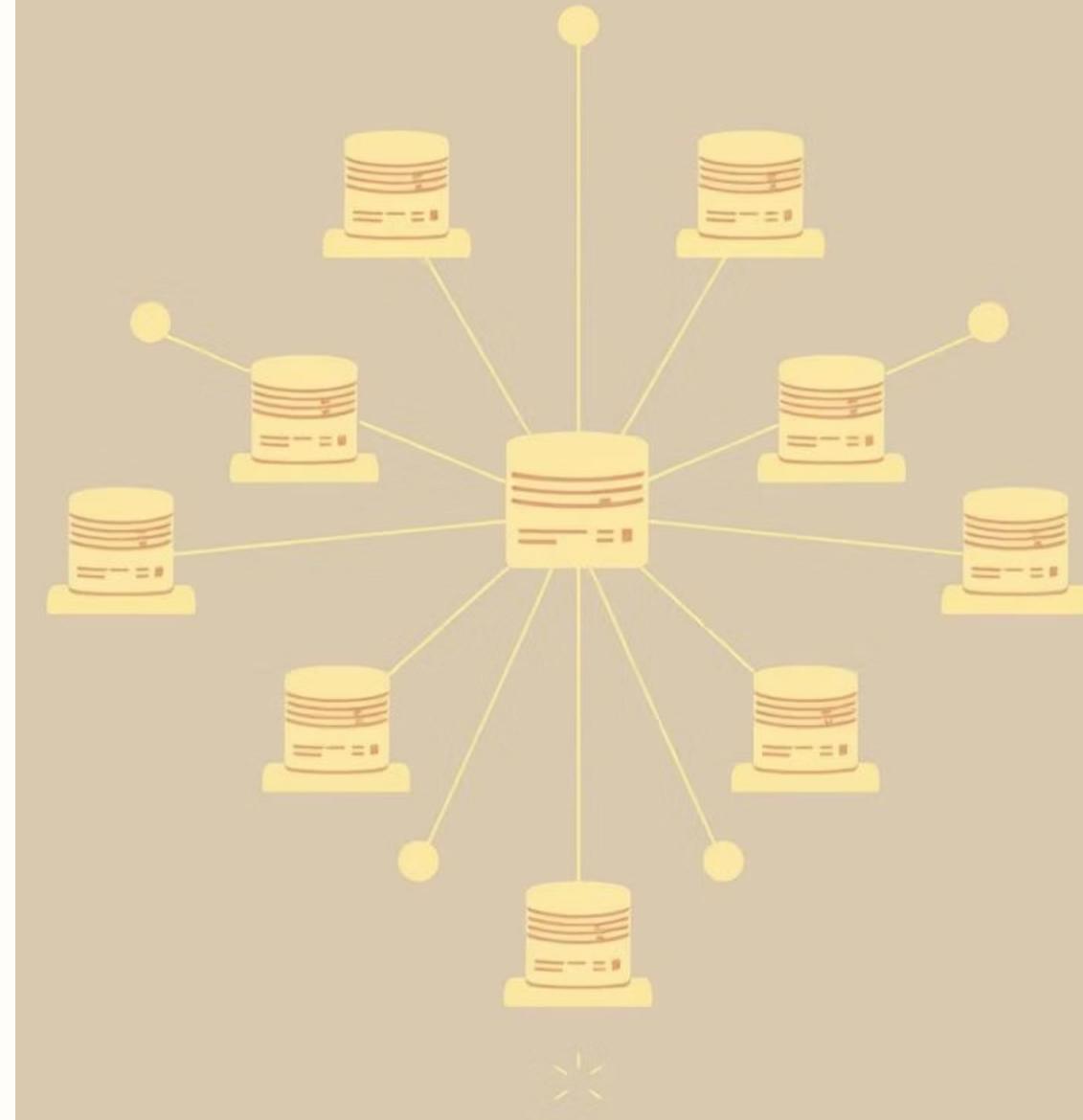
Project Overview & Problem Statement

Project Goal

Analyze e-commerce sales data using SQL to understand revenue, product performance, customer behavior, and sales trends.

Business Need

A retail e-commerce company seeks actionable insights from historical data in a star-schema data warehouse for reporting and decision-making.



Key Performance Metrics

29.3M 60K 18.4K

Total Revenue

Overall sales
generated.

Quantity Sold

Total units moved.

37%

Repeat
Customer Rate

Loyal customer base.

Unique
Customers

Distinct buyers.

| | Metric | Value |
|---|---------------------|----------|
| 1 | Total Revenue | 29356250 |
| 2 | Total Quantity Sold | 60423 |
| 3 | Unique Customers | 18484 |
| 4 | Active Products | 226 |



Top Products by Quantity Sold

- 1 Water Bottle - 30 oz.
4,249 units sold.
- 2 Patch Kit/8 Patches
3,191 units sold.
- 3 Mountain Tire Tube
3,096 units sold.
- 4 Road Tire Tube
2,376 units sold.



Top Products by Revenue

1

Mountain-200 Black-46

\$1,373,454 in revenue.

2

Mountain-200 Black-42

\$1,363,128 in revenue.

3

Mountain-200 Silver-38

\$1,339,394 in revenue.

4

Mountain-200 Silver-46

\$1,301,029 in revenue.

| | | |
|---|-------------|----------|
| 1 | Bikes | 28316272 |
| 2 | Accessories | 700262 |
| 3 | Clothing | 339716 |

Category & Product Line Revenue

Category Revenue

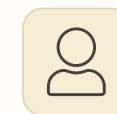
- Bikes: \$28,316,272
- Accessories: \$700,262
- Clothing: \$339,716

Product Line Revenue

- Road: \$14,622,850
- Mountain: \$10,250,982
- Touring: \$3,879,135
- Other: \$603,283



Customer Insights



Top Customer

Jordan Turner: \$15,998



Top Revenue Countries

US, Australia, UK lead sales.



Gender Spend

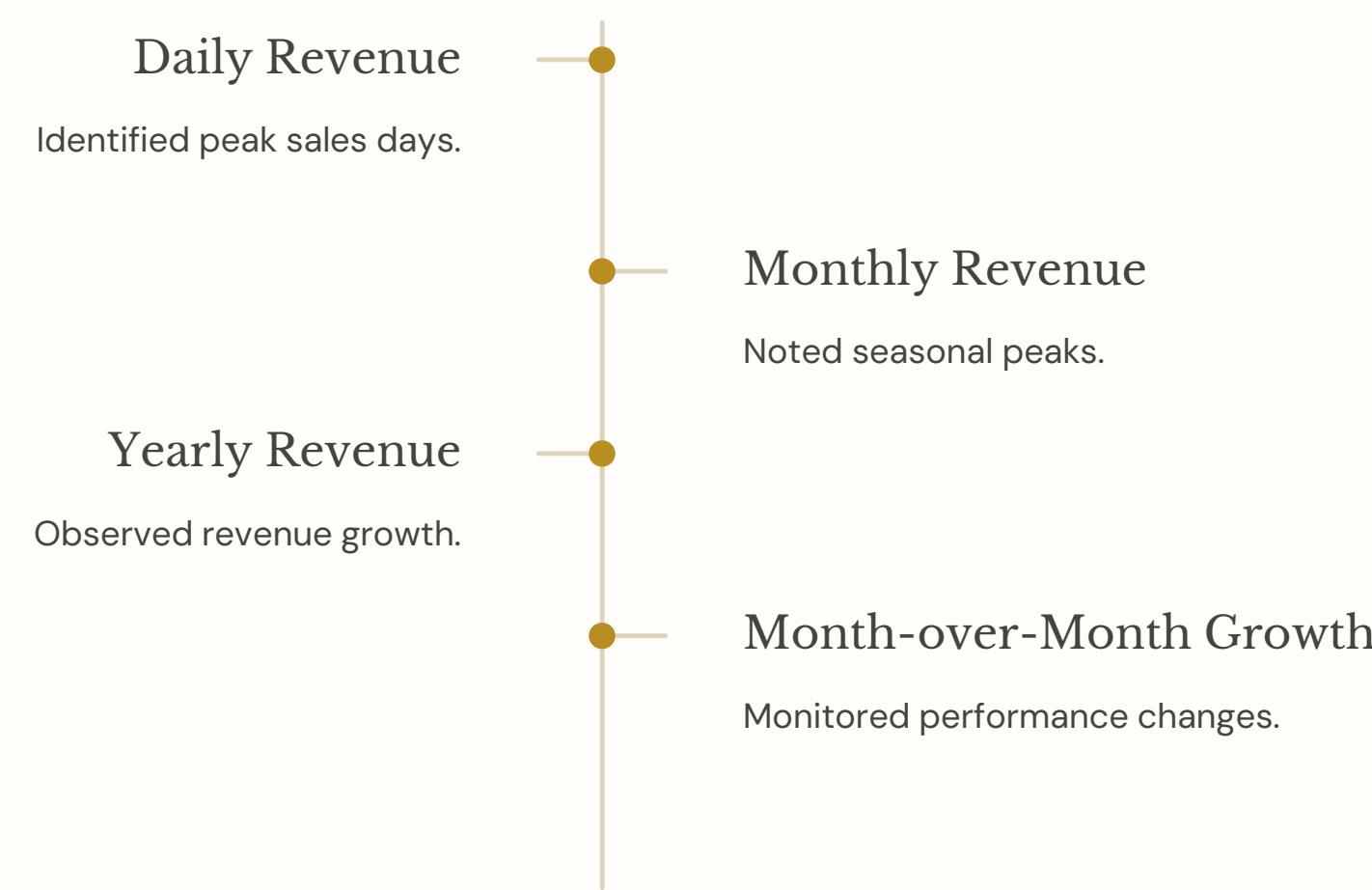
Female slightly outspends Male.



Marital Status

Married customers contribute more.

Time-Based Sales Trends



Profitability & Shipping Analysis

1

Profit per Product/Category

Identified top profitable items.

2

Products with Negative Profit

Highlighted items selling below cost.

3

Average Shipping Days

Assessed shipment efficiency.

4

Late Deliveries

Pinpointed areas for improvement.

| | category | total_profit |
|---|-------------|--------------|
| 1 | Bikes | 11109565 |
| 2 | Accessories | 439510 |
| 3 | Clothing | 136682 |

Key Insights & Recommendations



Revenue & Customers

Total Revenue: \$29.3M, 37% repeat customers.

Product Dominance

Bikes and Road product lines drive revenue.

Market Strength

US & Australia are strongest markets.

Actionable Insights

SQL analysis provides data for strategic decisions.