



E-Commerce Sales Analysis

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

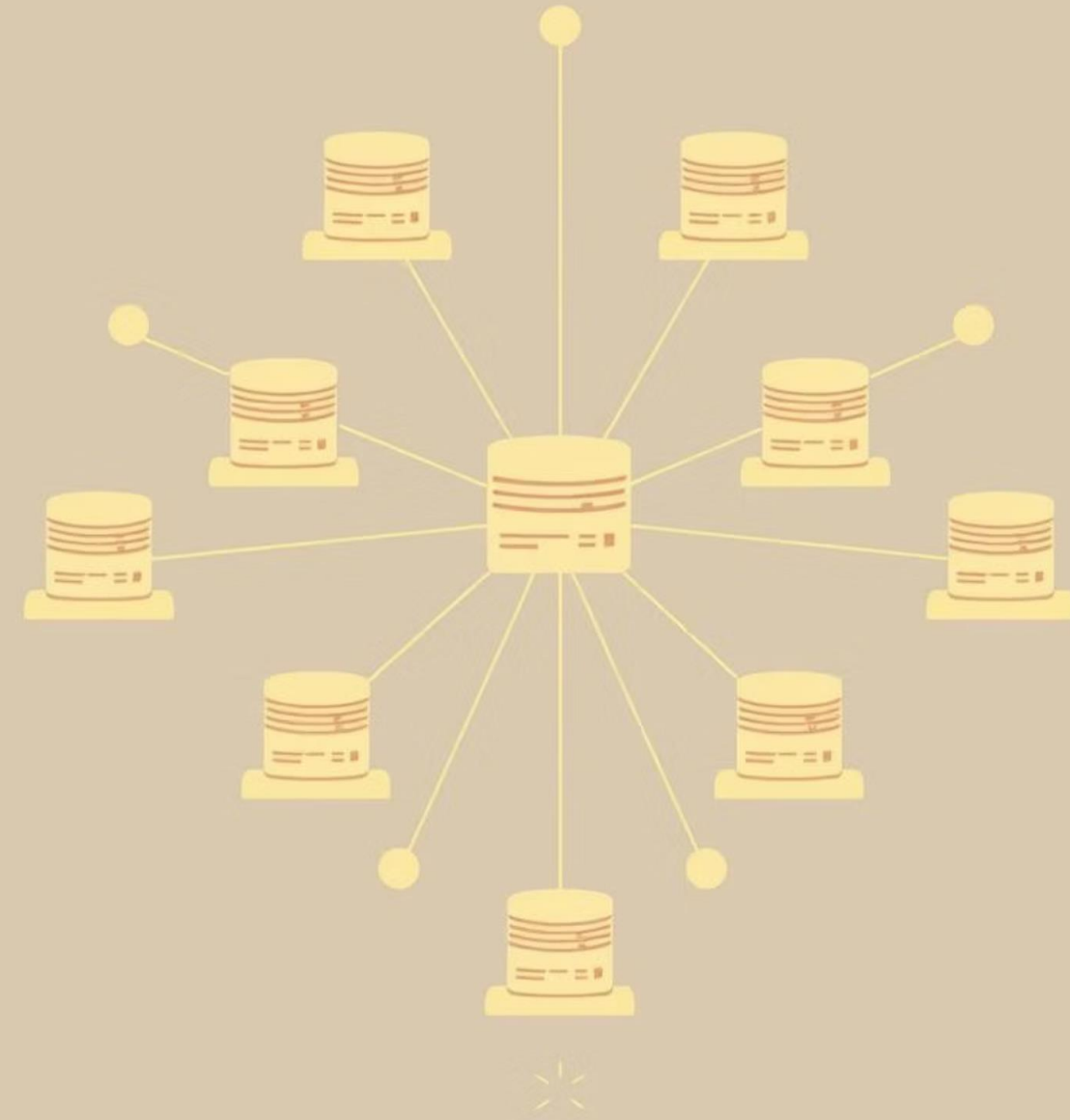
Project Overview & Problem Statement

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.

Unique
Customers

Distinct buyers.

37%

Repeat
Customer Rate

Loyal customer base.

	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

Daily Revenue
Identified peak sales days.

Monthly Revenue
Noted seasonal peaks.

Yearly Revenue
Observed revenue growth.

Month-over-Month Growth
Monitored performance changes.

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.

