



# E-Commerce Sales Analysis

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

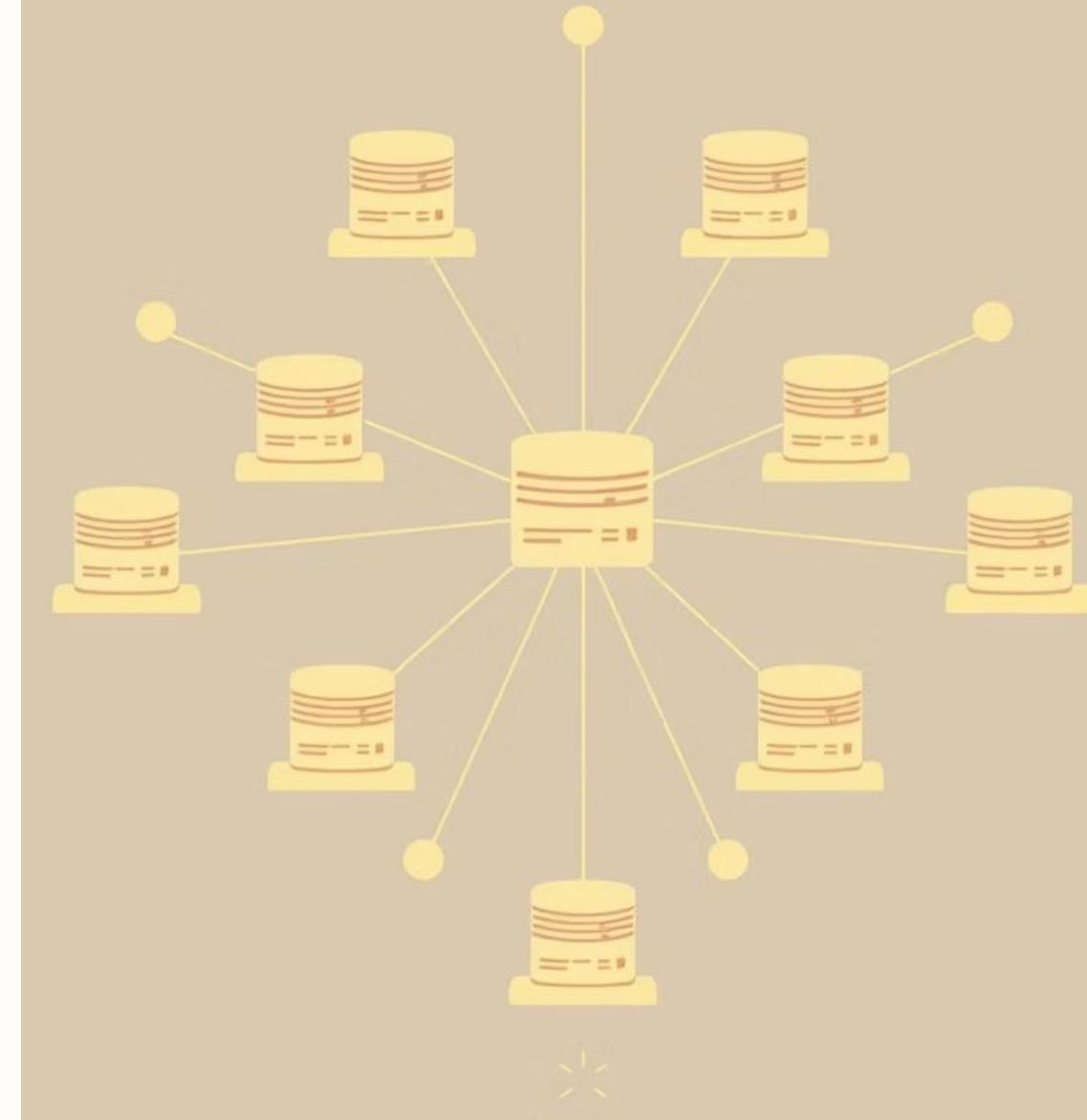
# Project Overview & Problem Statement

## 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

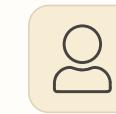
## Category Revenue

- 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

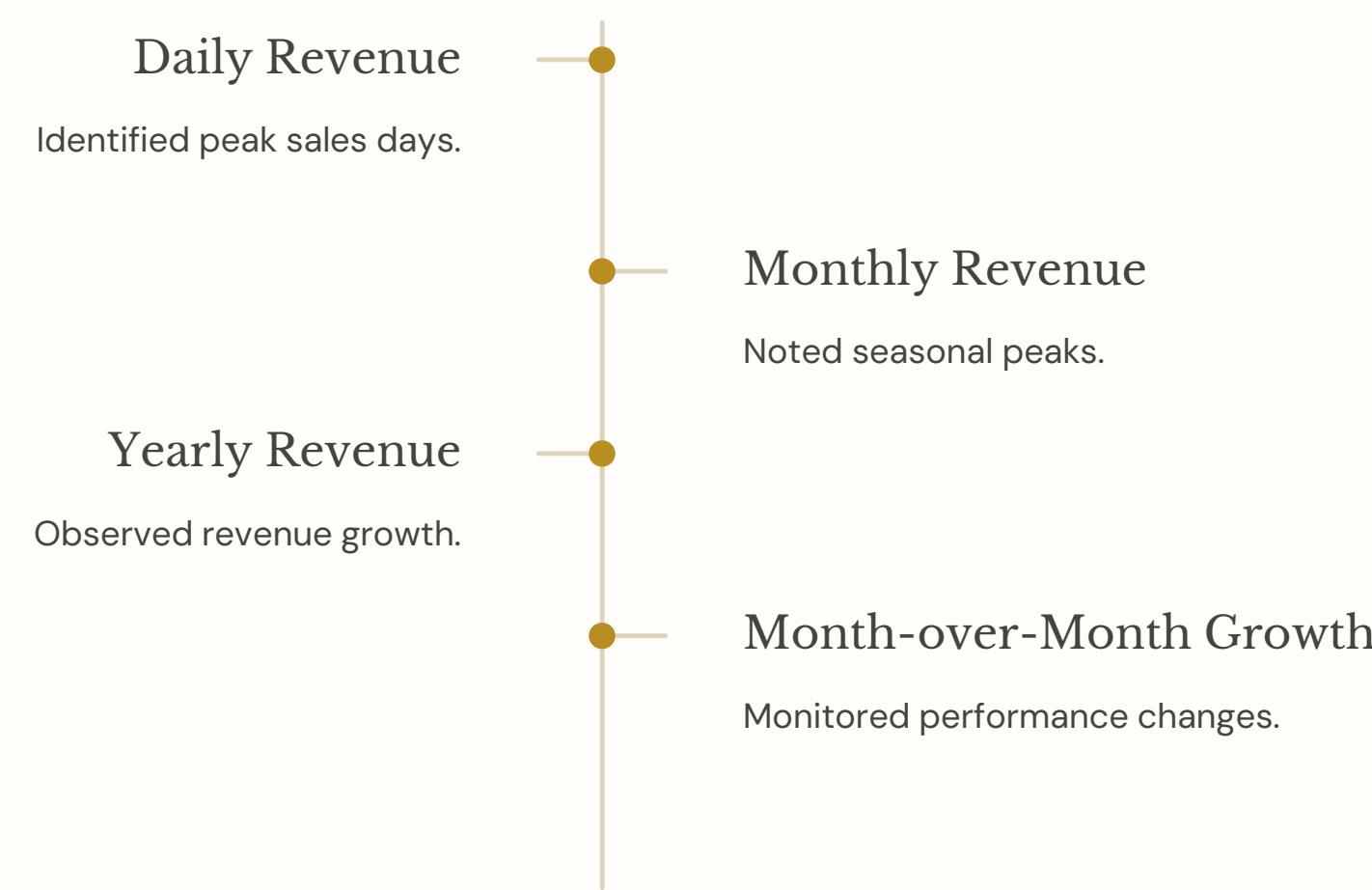
Female slightly outspends Male.



## 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.