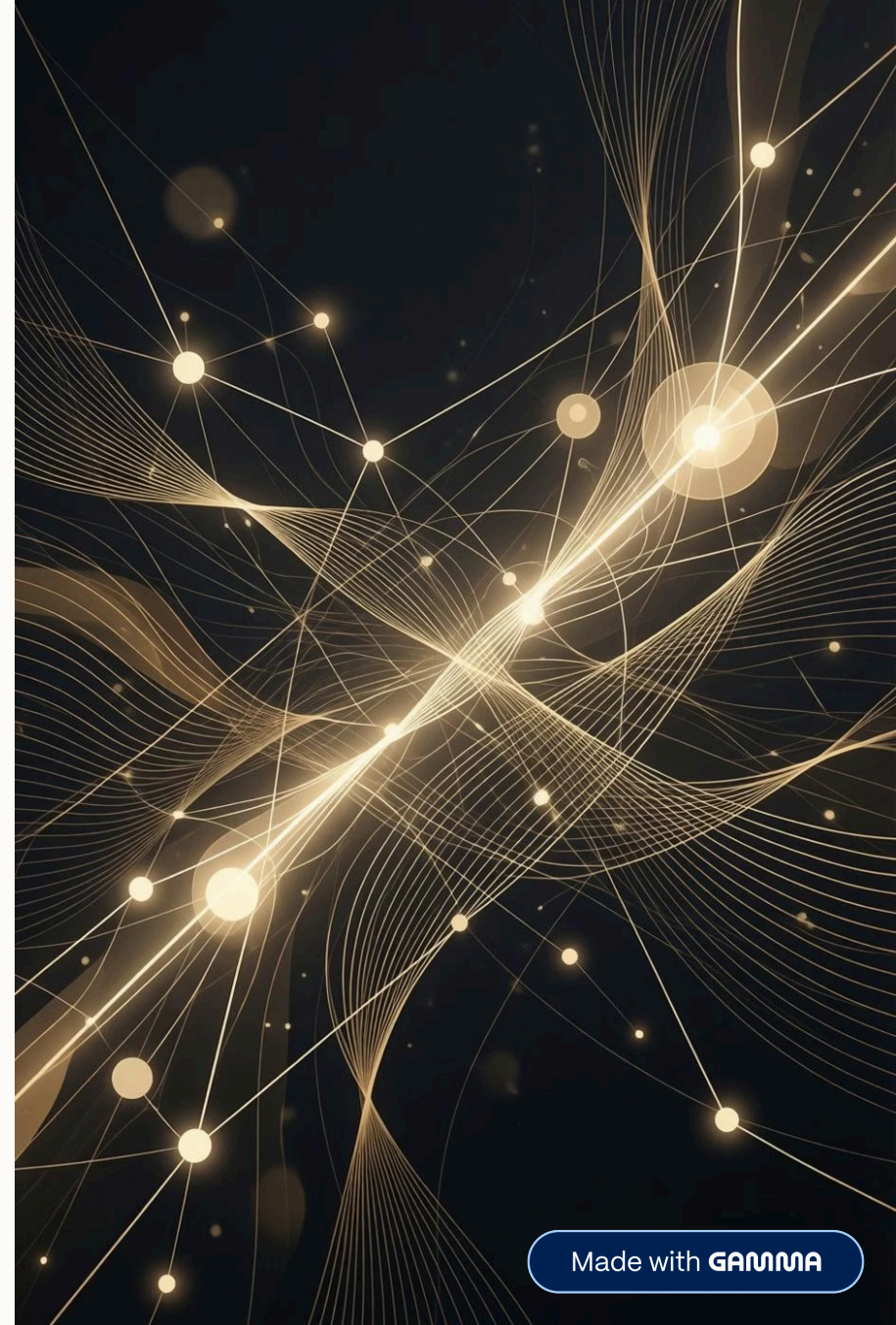# Sales Data Analysis

Data Preparation & Overview

Libraries Used

- Pandas
- Numpy
- Matplotlib
- Seaborn

Dataset Loaded

Flipkart Sales Dataset (.xlsx)
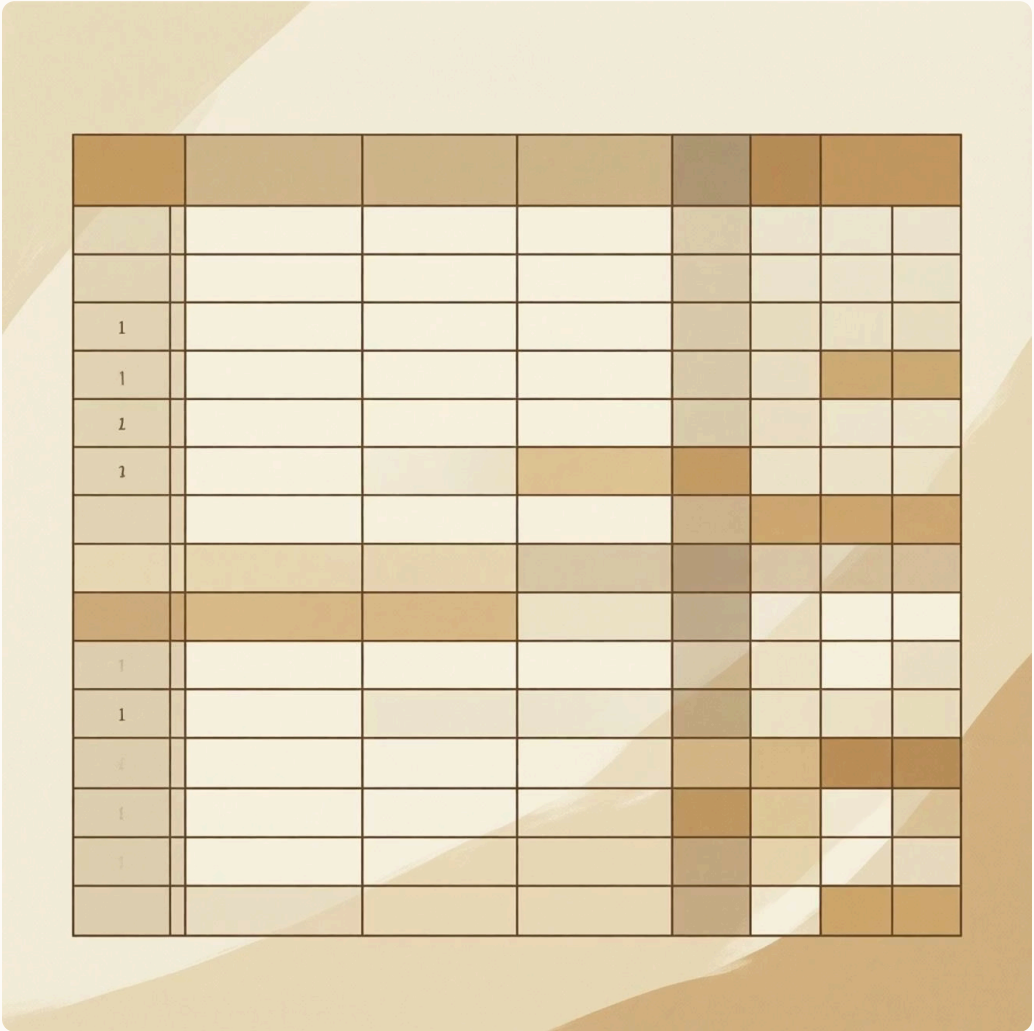
Initial Data Check

Dataset Shape

(133,583 rows, 19 columns)

Data Types

Datetime, Int64, Object

Missing Values

Only 'Reason' column has missing values (34,981 non-null)

Data Cleaning & Metrics

Duplicates Removed

28,982 duplicate records dropped.

Total Orders

113,001 unique orders.

Products Sold

602,835 total products.

Financial Overview

$60....

Total Cost

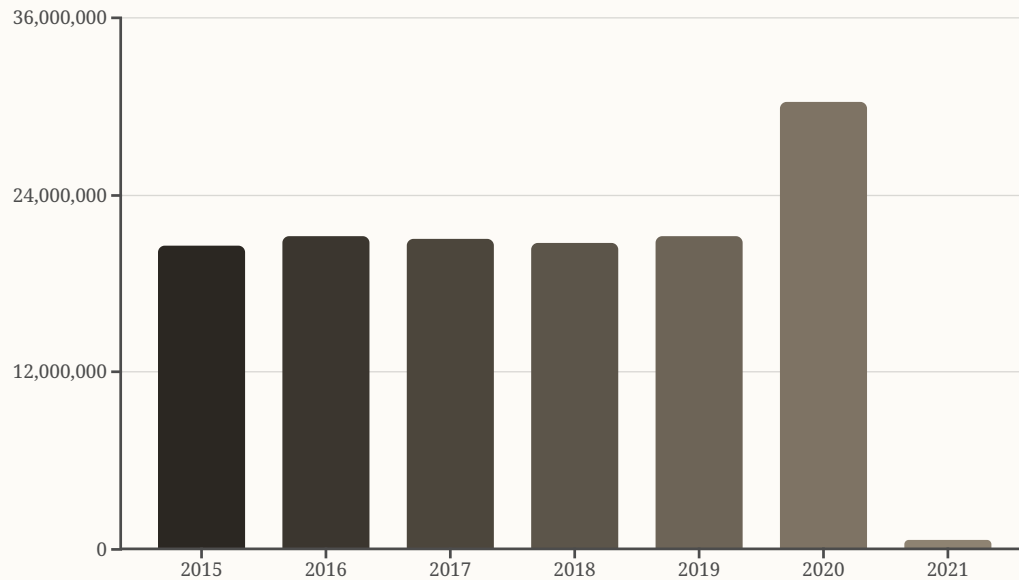**$135...**

Total Revenue

$75....

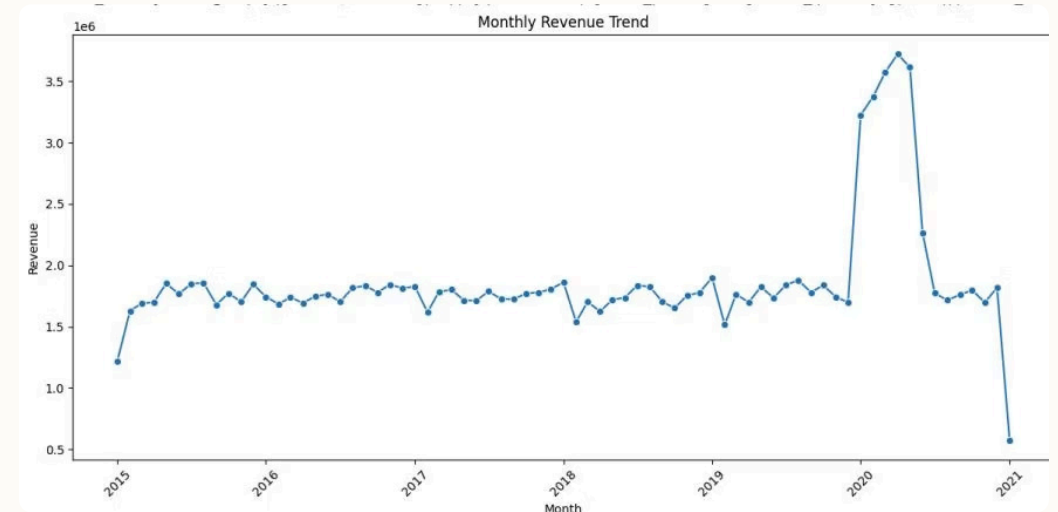Total Profit

Revenue Trends Over Time

Yearly Revenue

Significant spike in 2020 revenue.

Monthly Revenue Trend

General upward trend with a peak in late 2020.

Top Selling Products

Focus on products driving the most sales volume.

Yazole Leather Wrist Watch
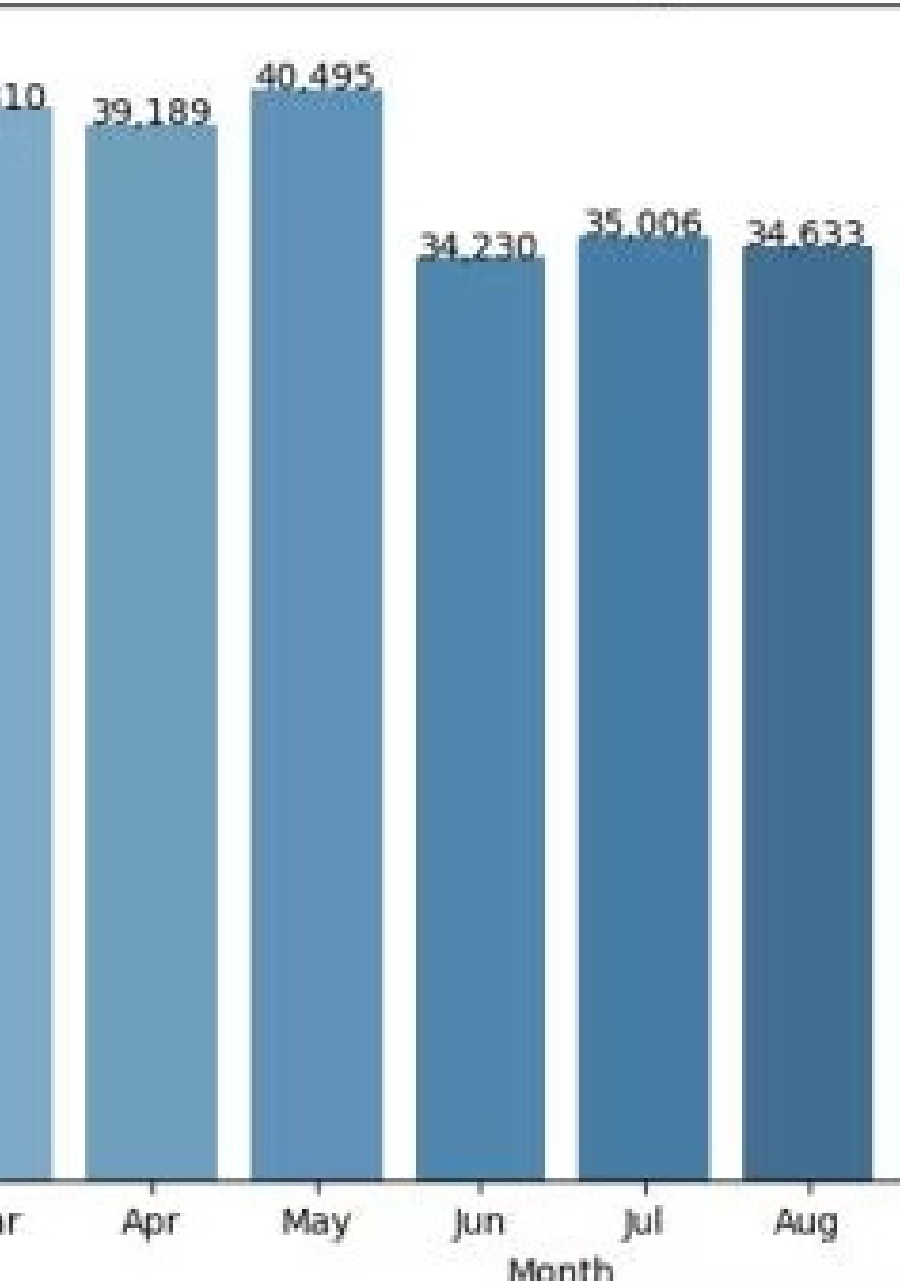
11,591 units sold.

Voice Blood Pressure Monitor

11,316 units sold.

Heman Ultra Slim Tea

11,303 units sold.

Total Products Sold per Month

Monthly Product Sales

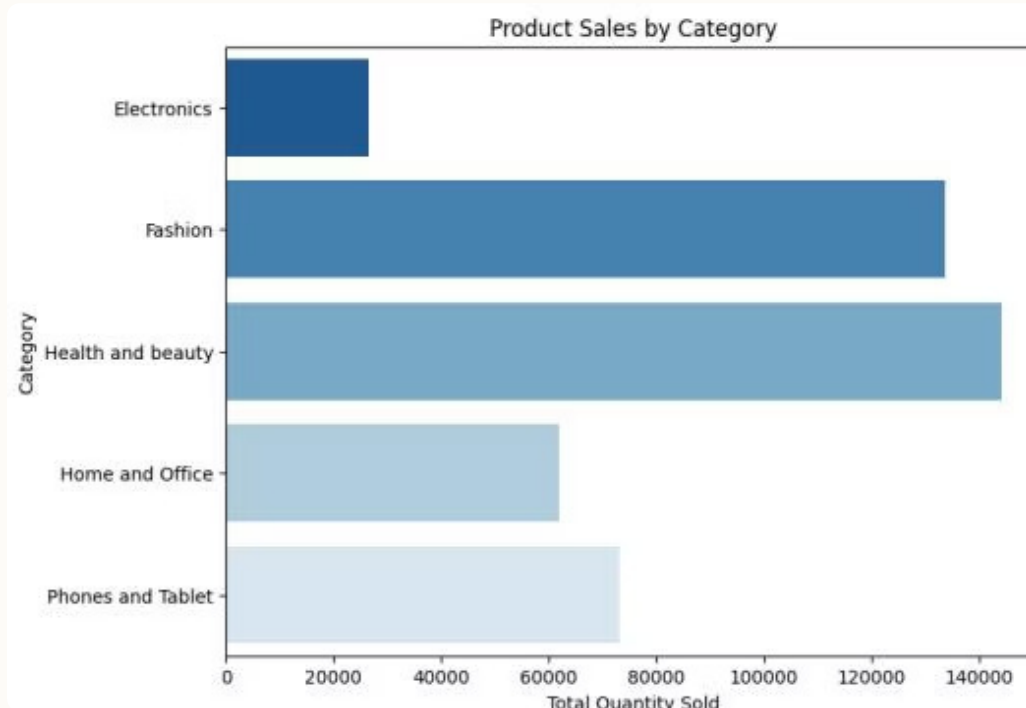Sales volume fluctuates throughout the year.

1 — Jan: 41,535

2 — May: 40,495

3 — Sep: 33,648
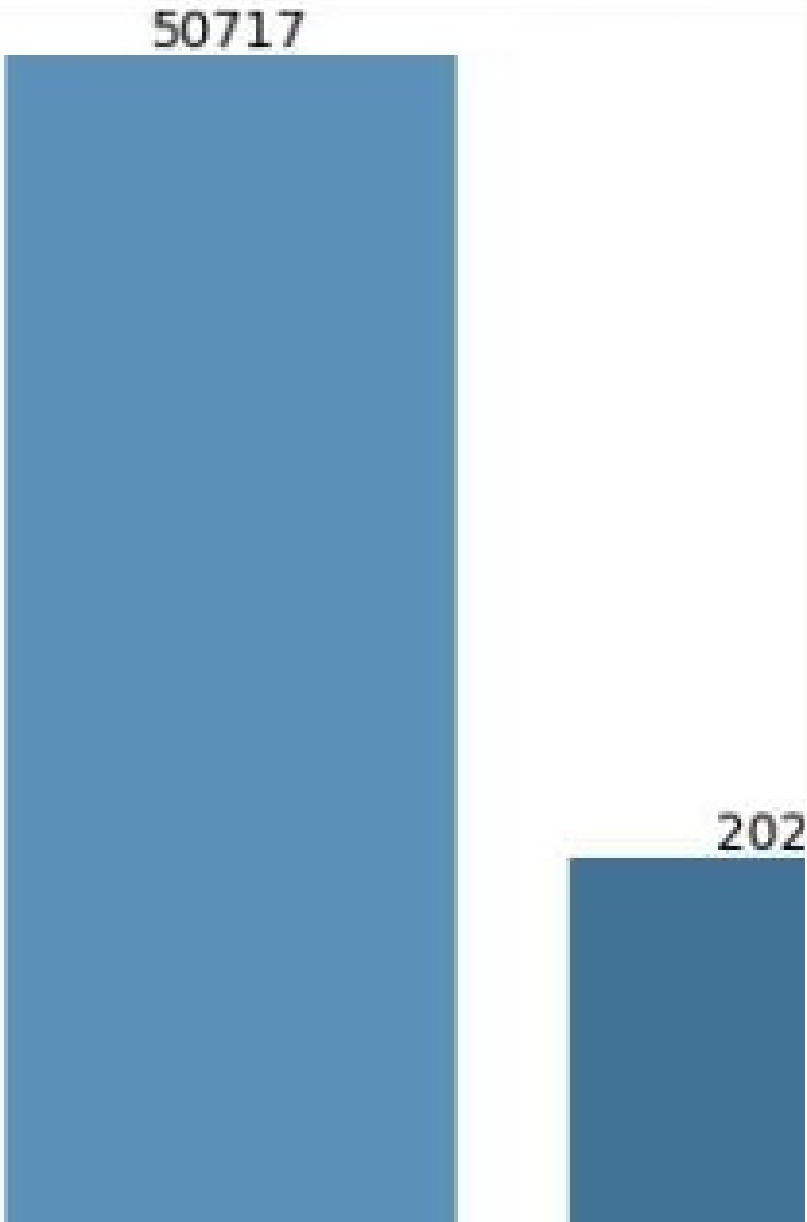
Product Category Performance

Product Sales by Category

Top Categories

- Health and Beauty: ~140,000 units
- Fashion: ~130,000 units
- Phones and Tablet: ~70,000 units

Price Range Sales

Product Sales by Price Range

Customer Insights

Customer Distribution by Ag

50717

202

Customer Demographics

Understanding our customer base by age group.

1

30-45 Age Group

39,732 customers.

2

45-60 Age Group

50,717 customers.

3

60-80 Age Group

20,288 customers.