AMAZON SALES ANALYSIS

INTRODUCTION

- In today's fiercely competitive e-commerce landscape, effective sales management is crucial for businesses to thrive. As companies strive to reduce costs and increase profits, understanding sales trends and the factors influencing them becomes paramount. This project, titled "Analyzing Amazon Sales Data," aims to provide actionable insights into sales patterns, helping businesses optimize their sales strategies and improve overall performance.
- By performing an ETL (Extract-Transform-Load) process on Amazon's sales dataset, we will analyze sales trends across various dimensions such as month-wise, year-wise, and yearly-month-wise. The analysis will not only reveal key metrics but also uncover meaningful relationships between different attributes, such as regions, product types, and sales channels.
- This project leverages advanced data science techniques and tools, including Python, Tableau, and Power BI, to extract, transform, and analyze the data. The findings from this project will enable businesses to make data-driven decisions, enhancing their ability to meet customer demands, reduce costs, and ultimately boost profitability.

OBJECTIVE

- The primary objective of this project is to analyze Amazon's sales data to uncover trends, identify key performance indicators (KPIs), and find meaningful relationships between different attributes of the dataset. The ultimate goal is to provide actionable insights that can inform strategic decision-making to enhance sales performance.

Main kpi'S

- Total Revenue
- Total Profit
- Units Sold
- Average Order Value
- Profit Margin
- Sales Growth Rate
- Year-over-Year (YoY) Growth
- Month-over-Month (MoM) Growth
- Return on Investment (ROI)
- Revenue per Region

POWER BI DASHBOARD

The project aims to analyze Amazon's sales data to uncover valuable insights and trends that can help optimize sales strategies. By leveraging Power BI, the project focuses on visualizing and interpreting sales trends, identifying key performance indicators (KPIs), and understanding the impact of various factors on sales performance.

AMAZON SALES

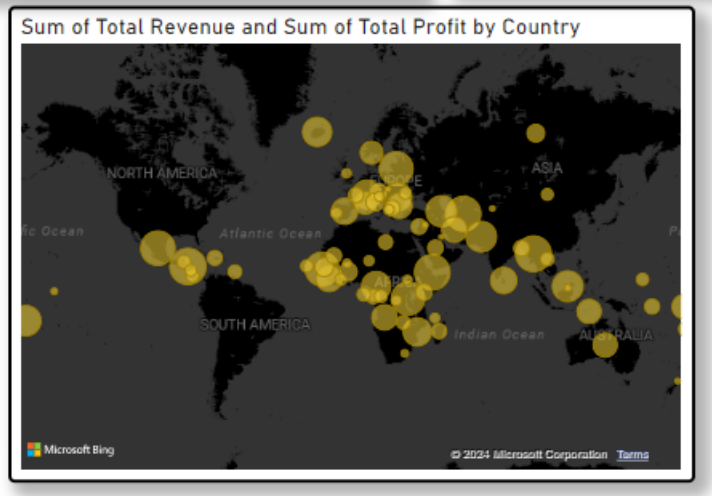
2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017

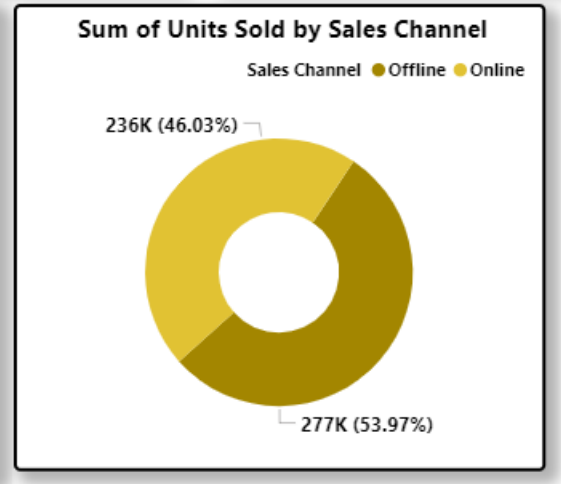
Month: All

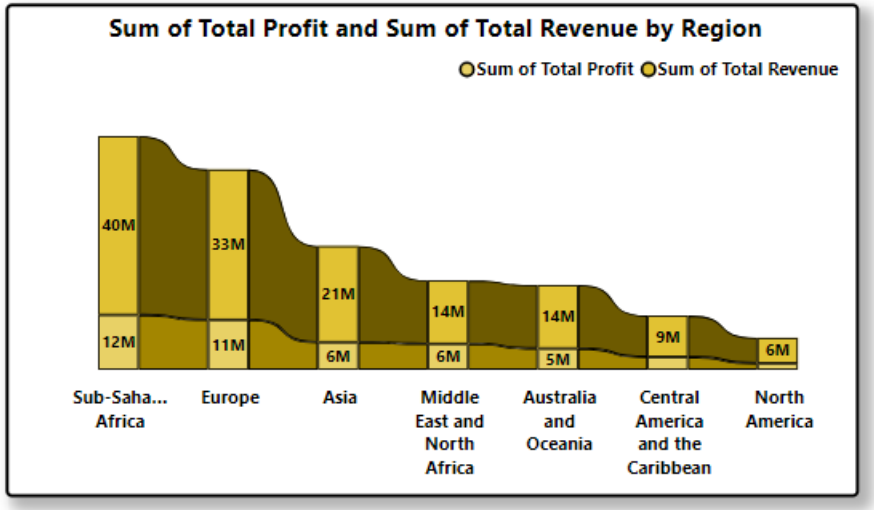
Country: All

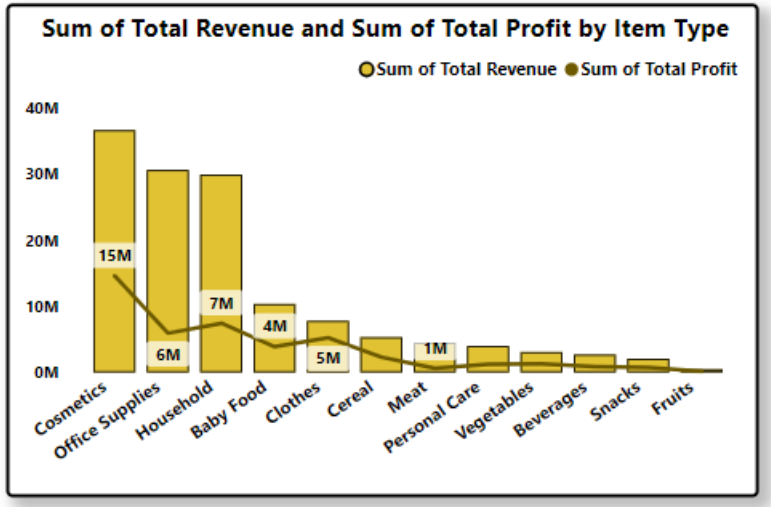
276.76	137.35M	23.36
Average of Unit Price	Sum of Total Revenue	Average Fulfillment Time

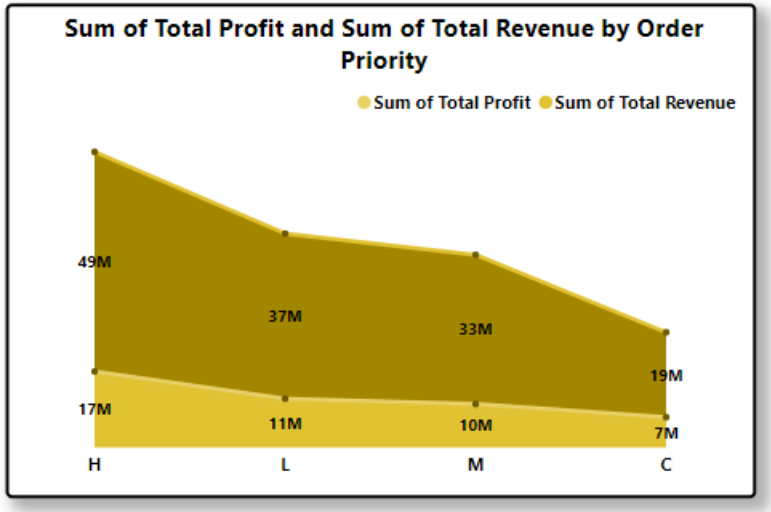
513K	44.17M	191.05	0.32
Sum of Units Sold	Sum of Total Profit	Average of Unit Cost	Gross margin

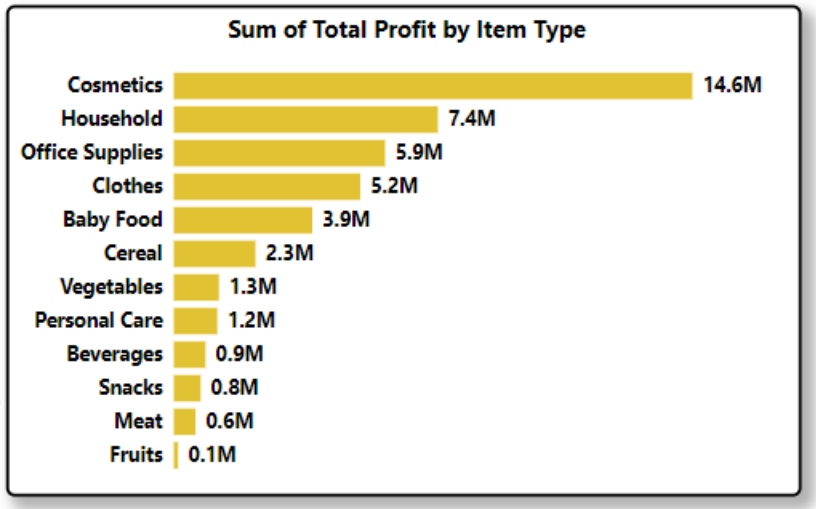


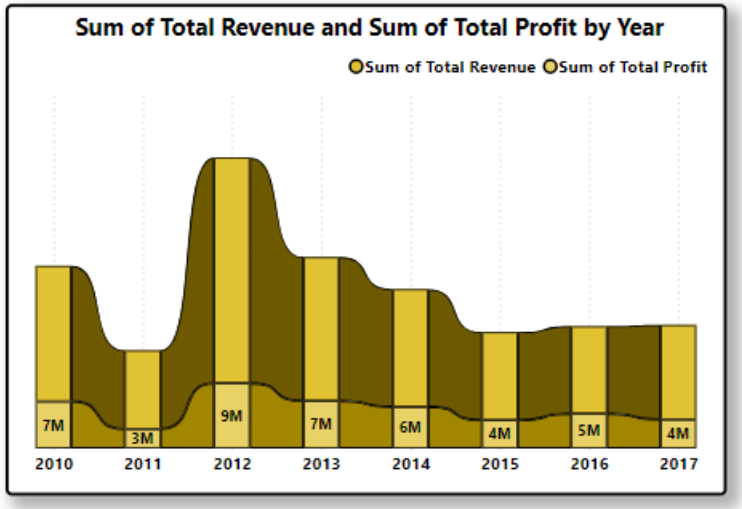


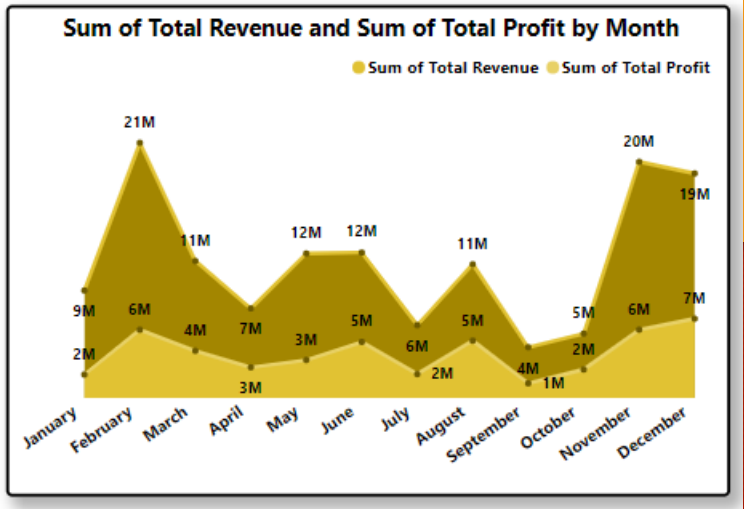


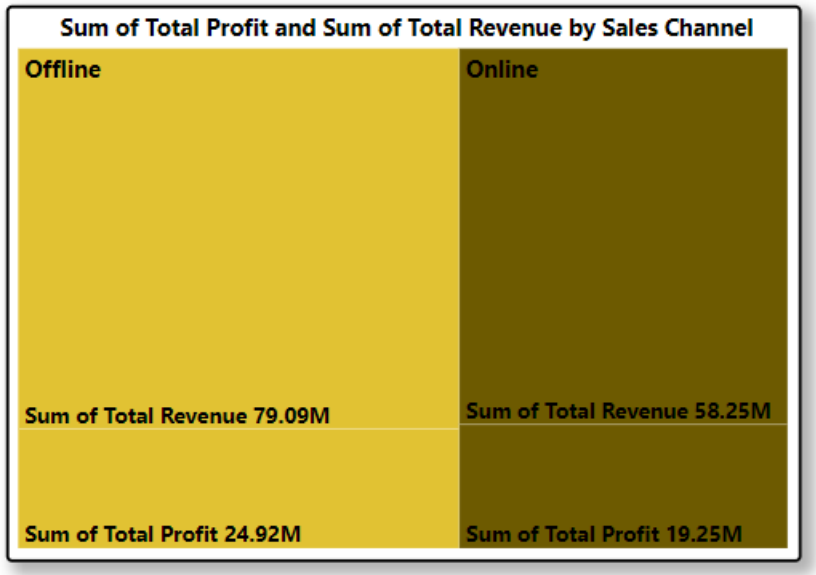


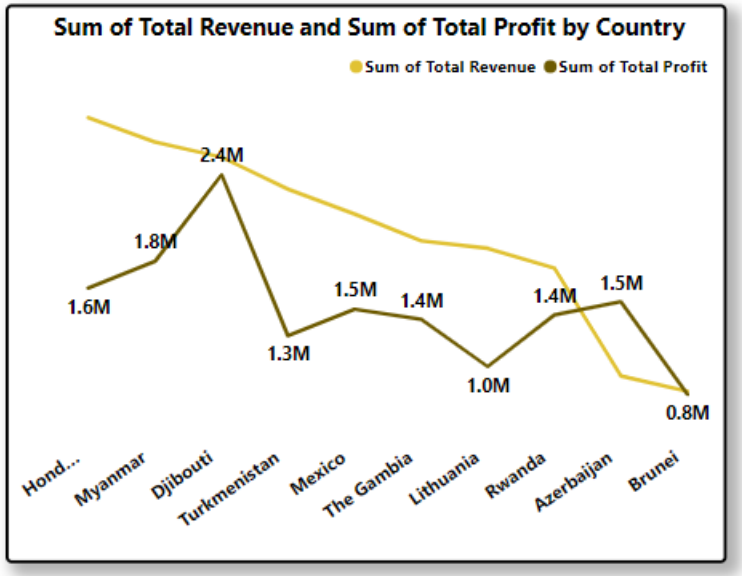



Sum of Total Profit by Item Type
Cosmetics 14.6M
Household 7.4M
Office Supplies 5.9M
Clothes 5.2M
Baby Food 3.9M
Cereal 2.3M
Vegetables 1.3M
Personal Care 1.2M
Beverages 0.9M
Snacks 0.8M
Meat 0.6M
Fruits 0.1M


Sum of Total Revenue and Sum of Total Profit by Year
Sum of Total Revenue
Sum of Total Profit
7M
3M
9M
7M
6M
4M
5M
4M
2010
2011
2012
2013
2014
2015
2016
2017


Sum of Total Revenue and Sum of Total Profit by Month
Sum of Total Revenue
Sum of Total Profit
January
February
March
April
May
June
July
August
September
October
November
December


Sum of Total Profit and Sum of Total Revenue by Sales Channel
Offline
Online
Sum of Total Revenue 79.09M
Sum of Total Revenue 58.25M
Sum of Total Profit 24.92M
Sum of Total Profit 19.25M


Sum of Total Revenue and Sum of Total Profit by Country
Sum of Total Revenue
Sum of Total Profit
1.6M
1.8M
2.4M
1.3M
1.5M
1.4M
1.0M
1.4M
1.5M
0.8M
Hond...
Myanmar
Djibouti
Turkmenistan
Mexico
The Gambia
Lithuania
Rwanda
Azerbaijan
Brunei

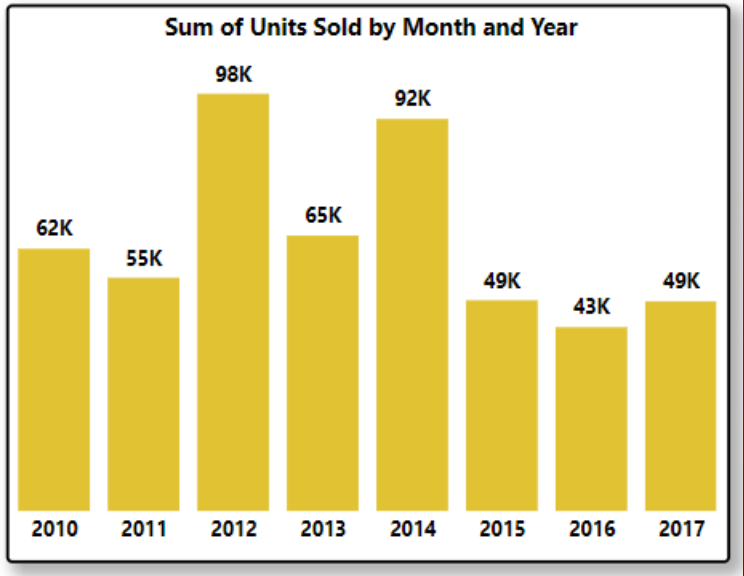

Sum of Units Sold by Month and Year
62K
55K
98K
65K
92K
49K
43K
49K
2010
2011
2012
2013
2014
2015
2016
2017

TABLEAU DASHBOARD

The goal of this project is to analyze and visualize Amazon's sales data to uncover trends, identify key performance indicators (KPIs), and reveal meaningful relationships between various attributes. The insights gained will help optimize sales strategies, improve distribution methods, and enhance profitability.

Total Profits Of Amazon Sales

Profits | Revenue | Units Sold

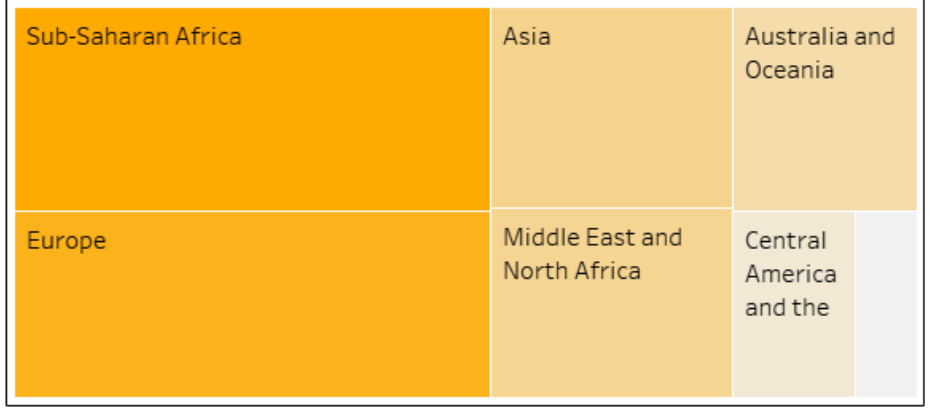
Sum Of Total Profit

44,168,198

Average Of Total Profits

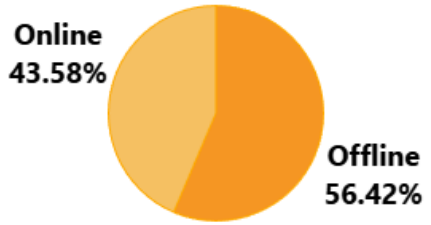
441,682

Total Profit By Region

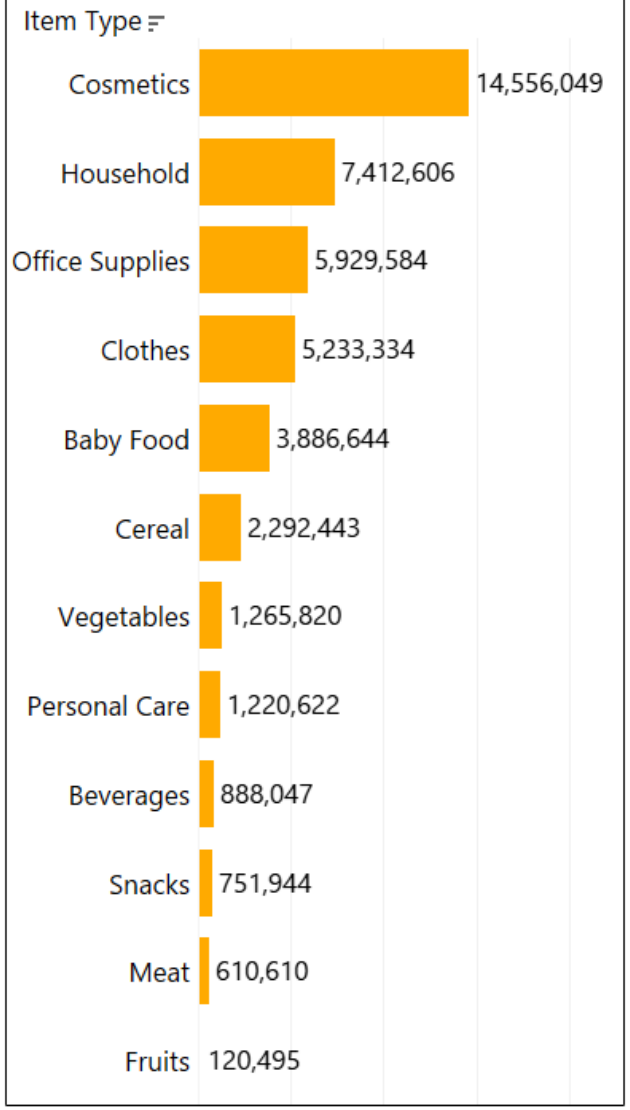


Total Profit By Country

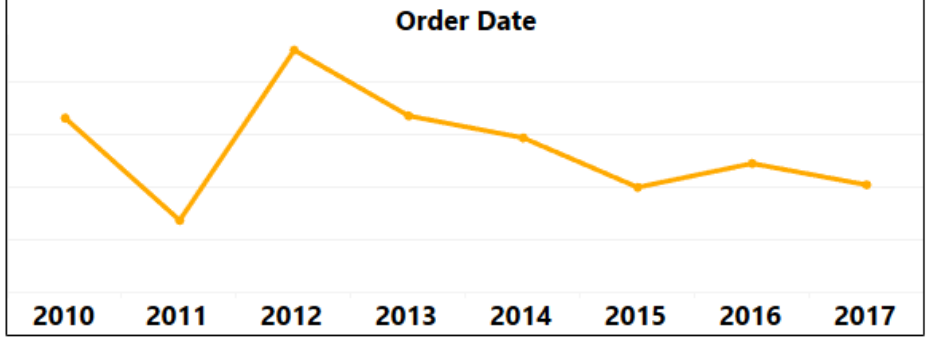
Total Profit By Sales Channel



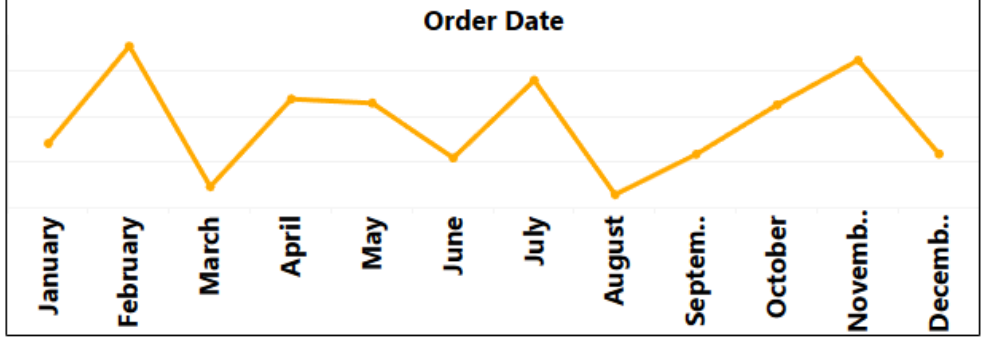
Total Profit By Item Type



Total Profit By Year



Total Profit By Month



Total Revenue Of Amazon Sales

Profits | Revenue | Units Sold

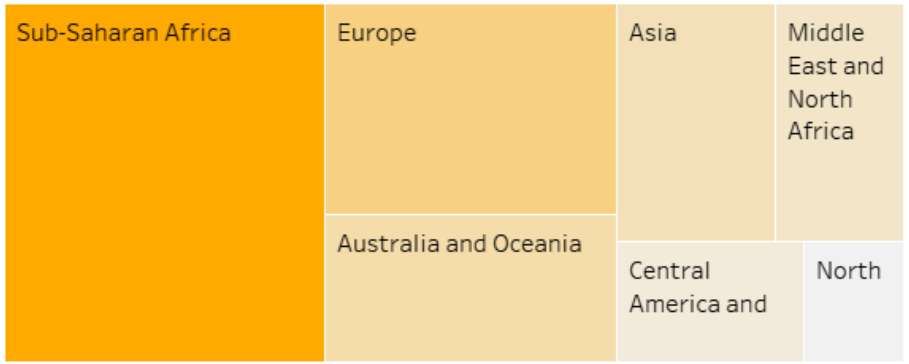
Sum Of Total Revenue

137,348,768

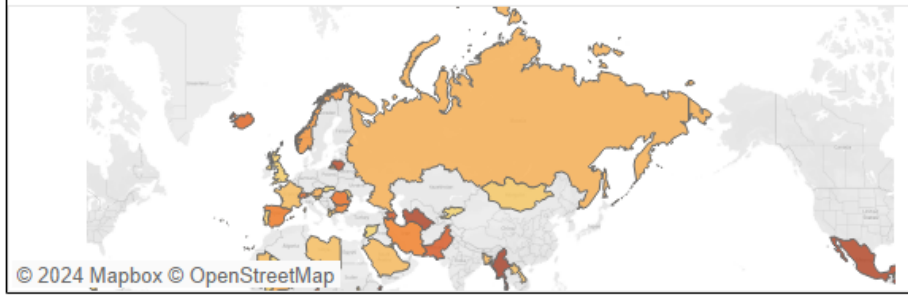
Average Of Total Revenue

1,373,488

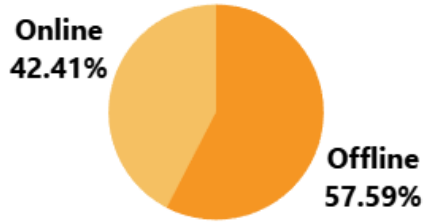
Total Units Sold By Region



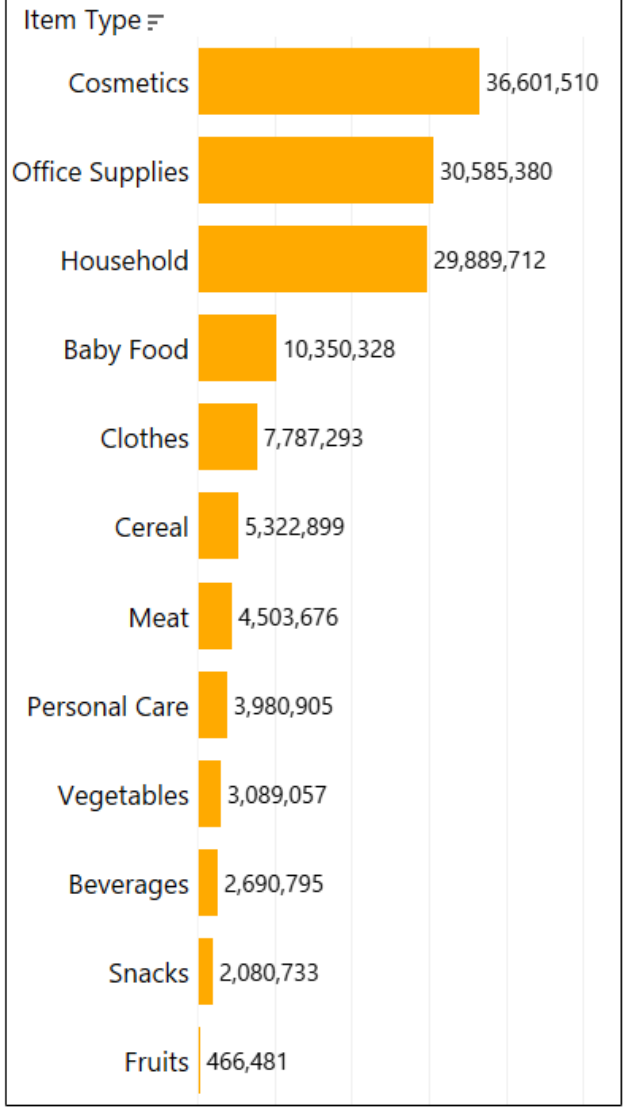
Total Revenue By Country



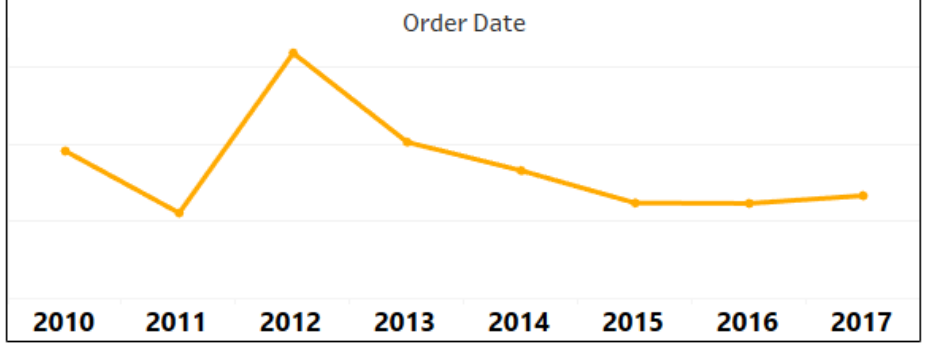
Total Revenue By Sales Channel



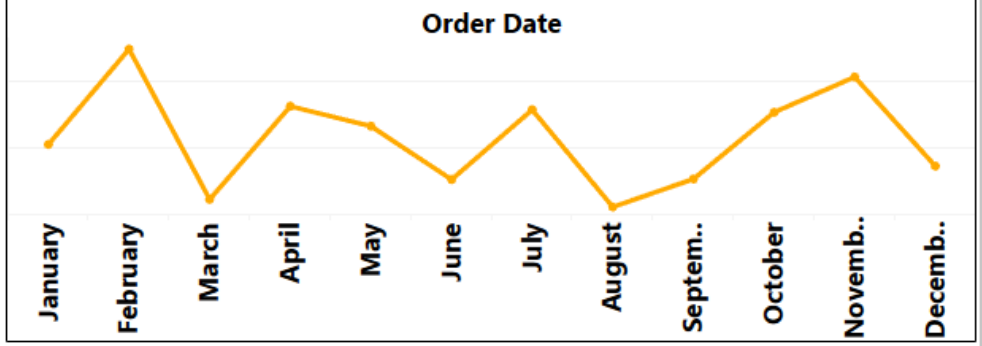
Total Revenue By Item Type



Total Revenue By Year



Total Revenue By Month



Total Units Sold Of Amazon Sales

Profits | Revenue | Units Sold

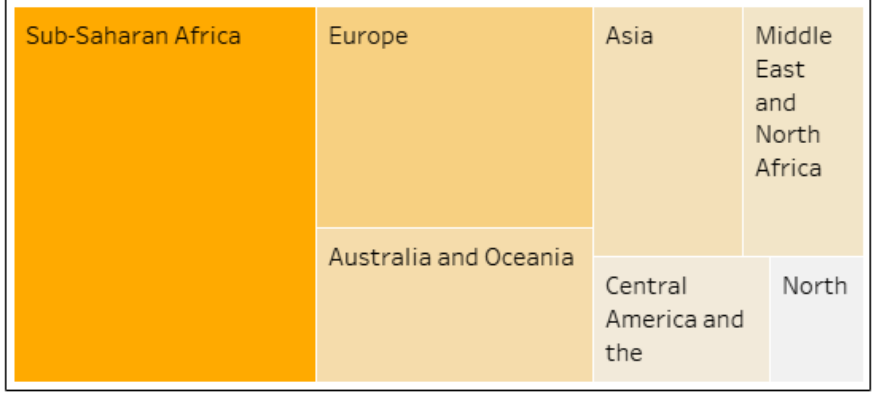
Sum Of Total Units Sold

5,12,871

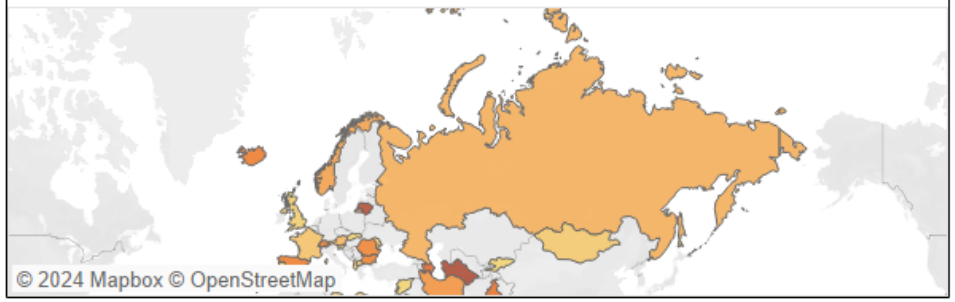
Average Of Total Units Sold

5,129

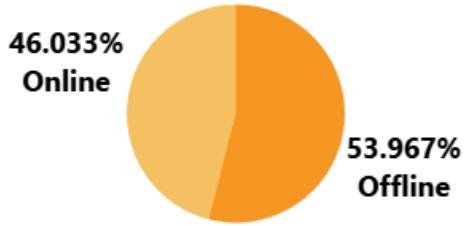
Total Units Sold By Region



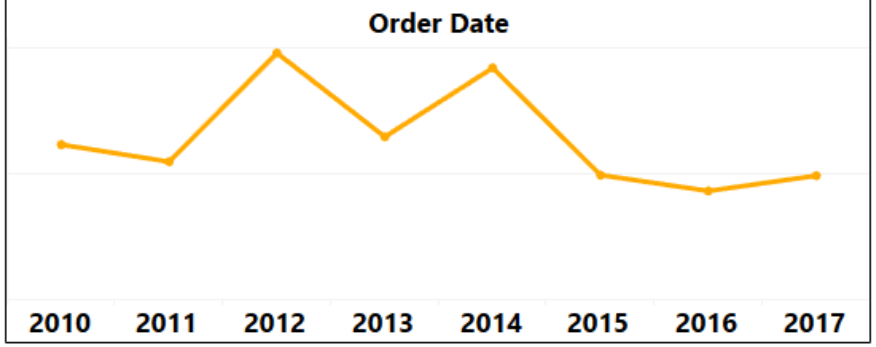
Total Units Sold By Country



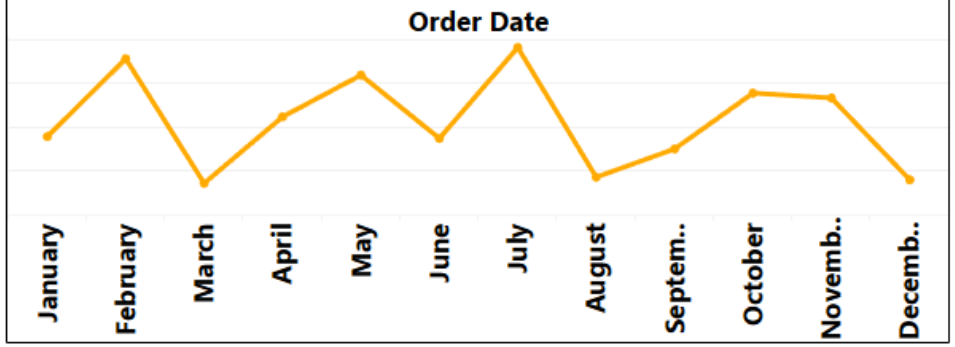
Total Units Sold By Sales Channel



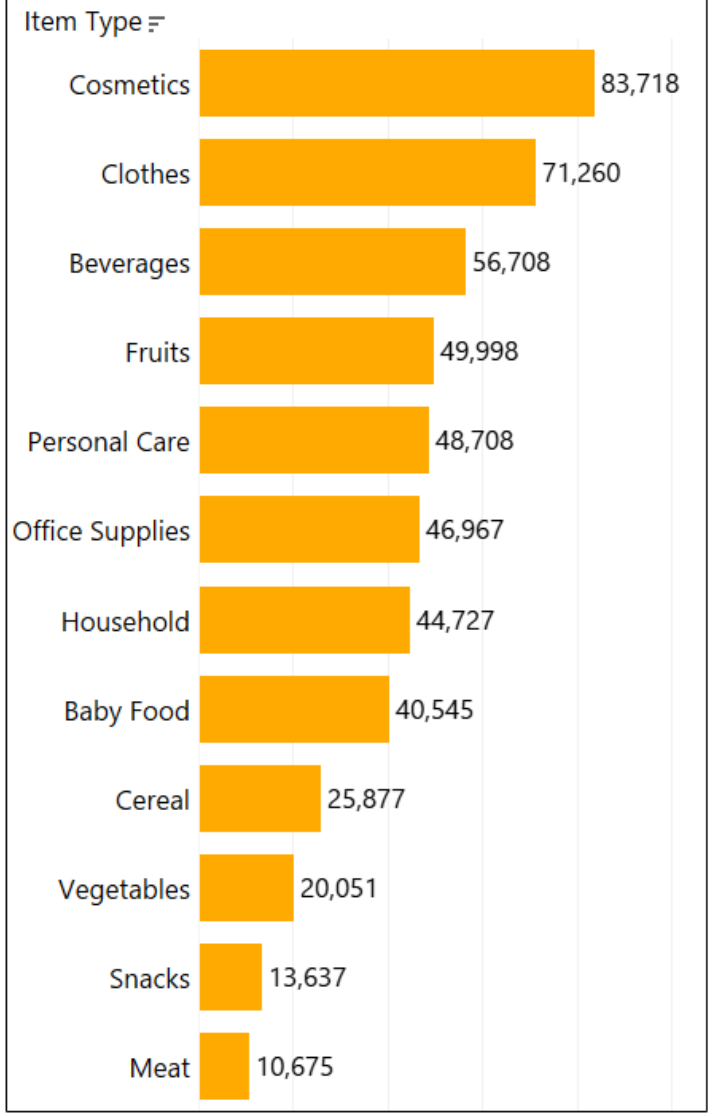
Total Units Sold By Year



Total Units Sold By Month

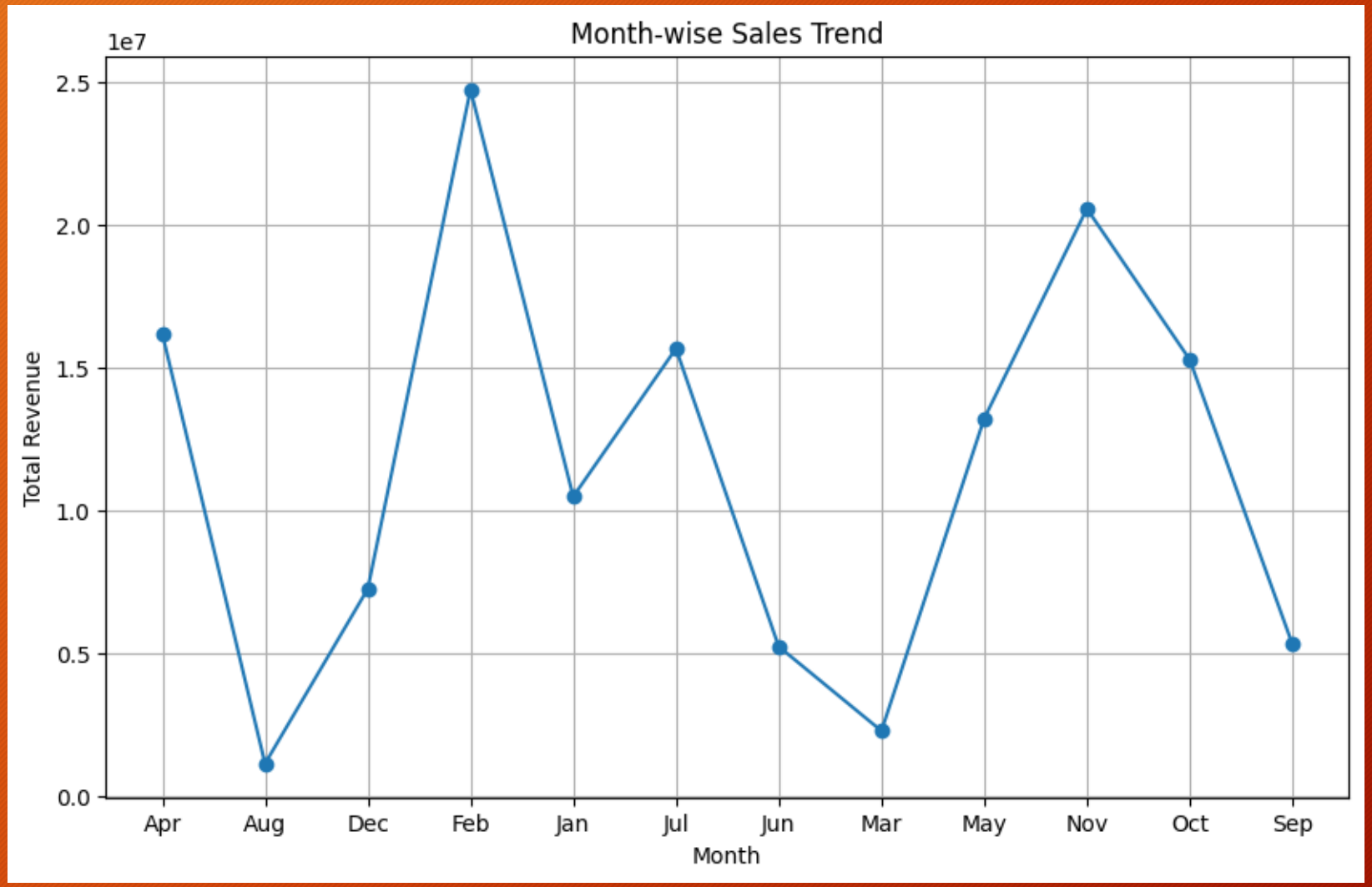


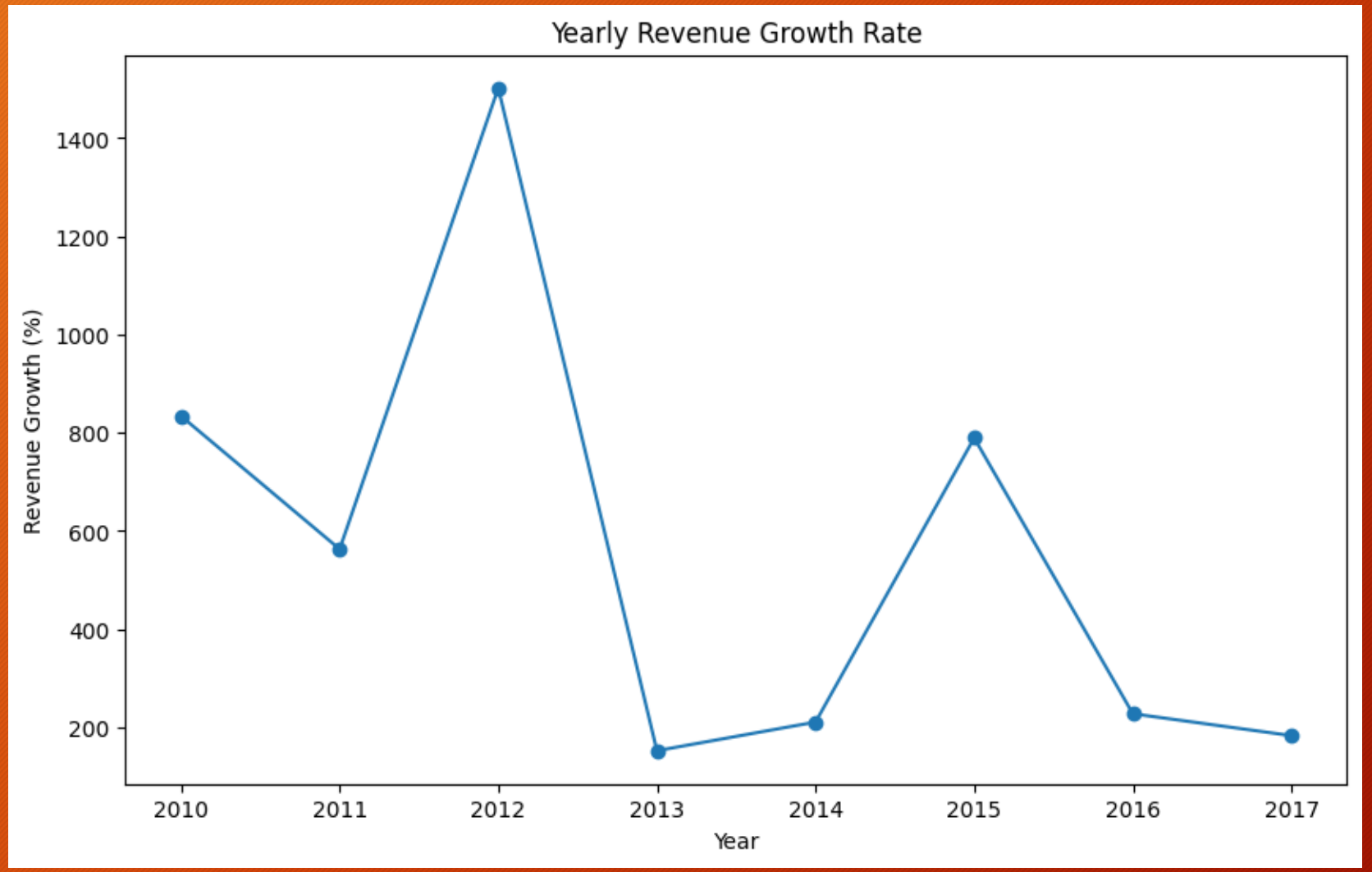
Total Units Sold By Item Type

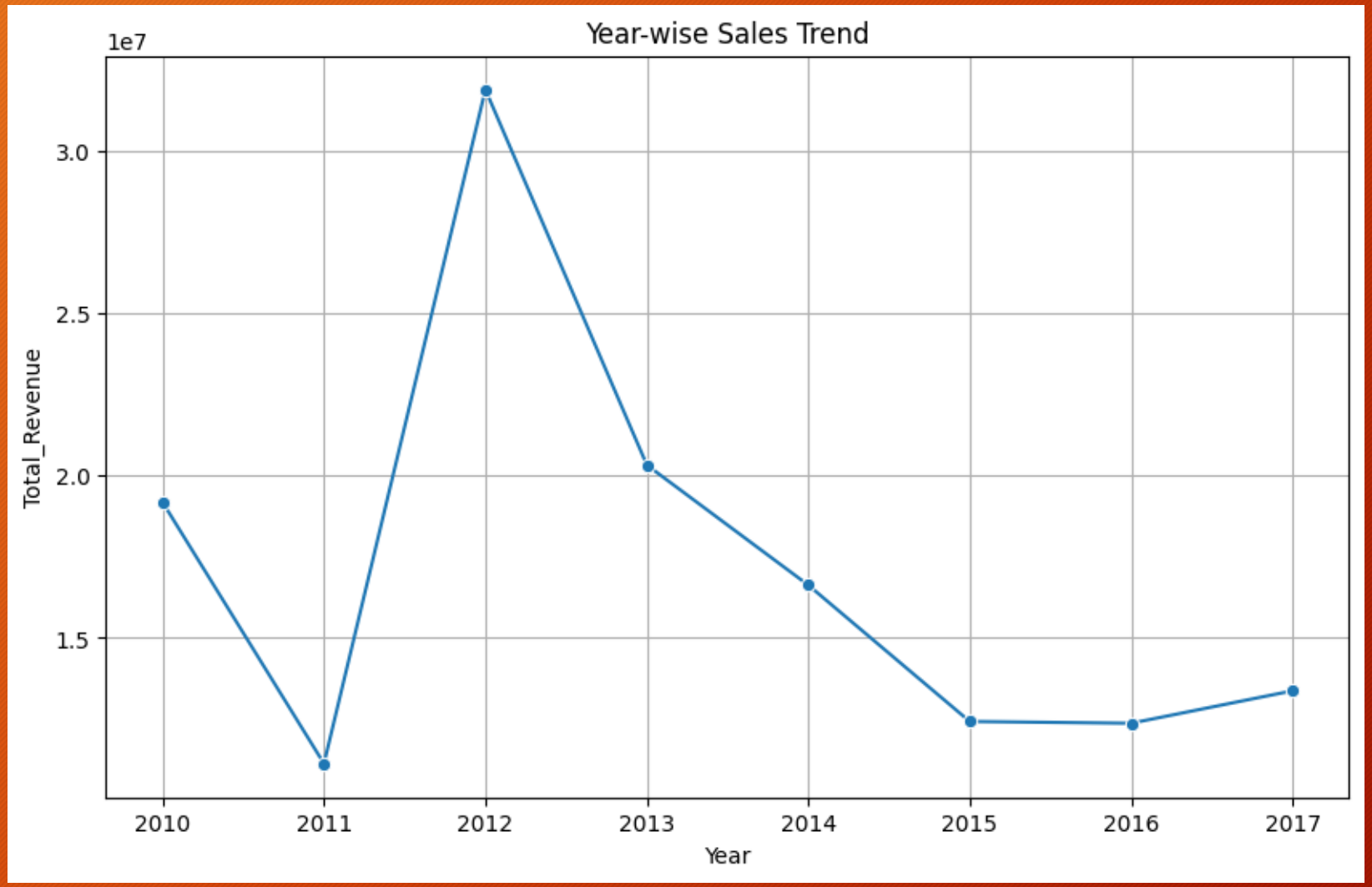


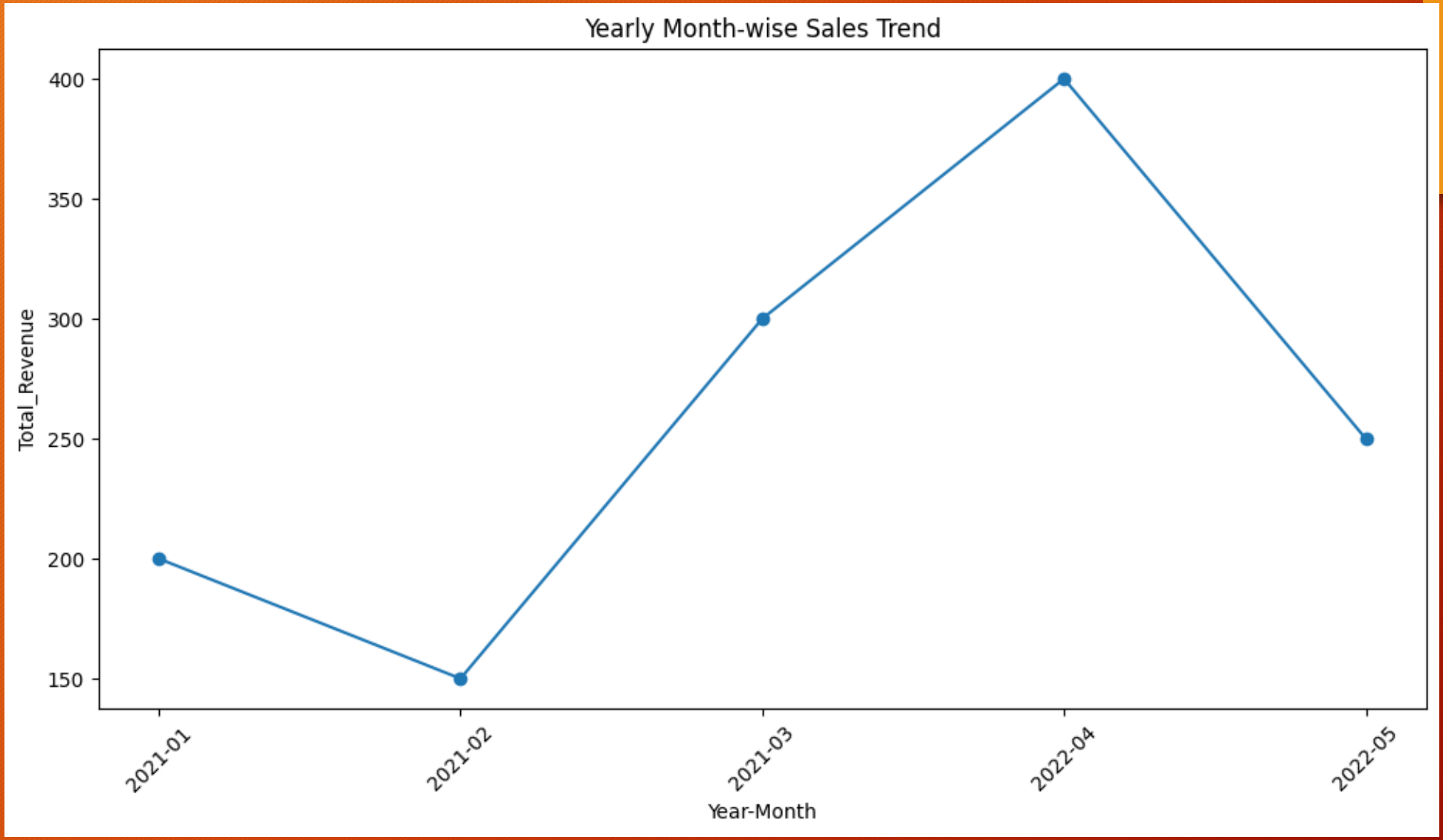
PYTHON

This Python-based analysis enables us to identify key sales trends, calculate essential KPIs, and explore the relationships between various attributes to optimize sales management strategies for better performance and profitability.


Month-wise Sales Trend
1e7
2.5
2.0
1.5
1.0
0.5
0.0
Total Revenue
Apr
Aug
Dec
Feb
Jan
Jul
Jun
Mar
May
Nov
Oct
Sep
Month


Yearly Revenue Growth Rate
Revenue Growth (%)
1400
1200
1000
800
600
400
200
2010
2011
2012
2013
2014
2015
2016
2017
Year


Year-wise Sales Trend
1e7
3.0
2.5
2.0
1.5
Total_Revenue
2010
2011
2012
2013
2014
2015
2016
2017
Year


Yearly Month-wise Sales Trend
Total_Revenue
400
350
300
250
200
150
2021-01
2021-02
2021-03
2022-04
2022-05
Year-Month

CONCLUSION

- The analysis of Amazon sales data has provided valuable insights into sales trends, key performance indicators, and the factors that drive sales performance. By leveraging these insights, Amazon can optimize its sales strategies, enhance customer satisfaction, and ultimately increase profitability. The recommendations provided in this report offer actionable steps that can be implemented to achieve these goals.

VISIT FOR DETAILED PROJECT

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Click on Github logo to visit the portfolio of the project

THANK YOU