

# Analysing Amazon Sales Data

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Data Science Project

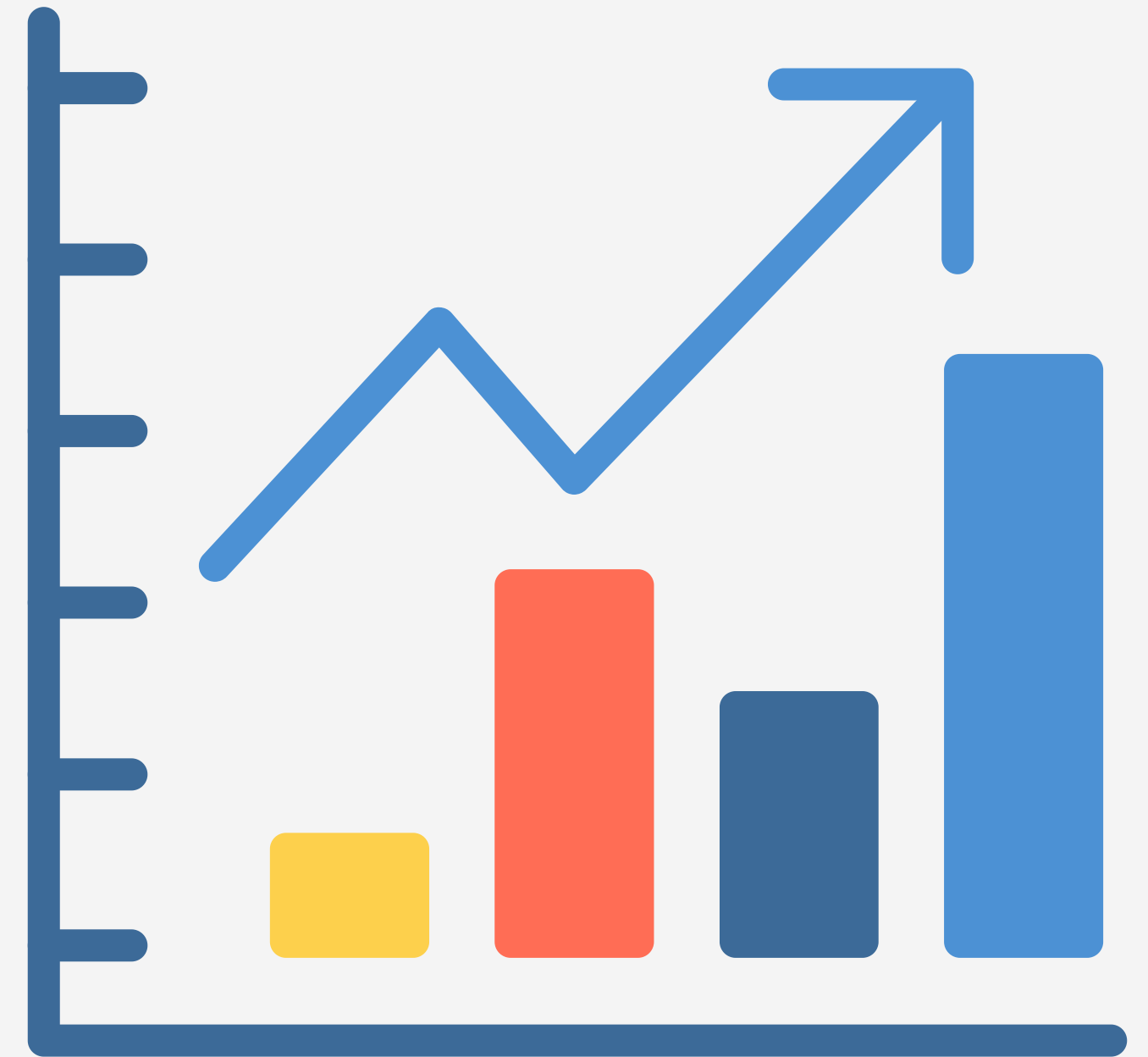
By: Ponnuri Eashwar Sai Akash



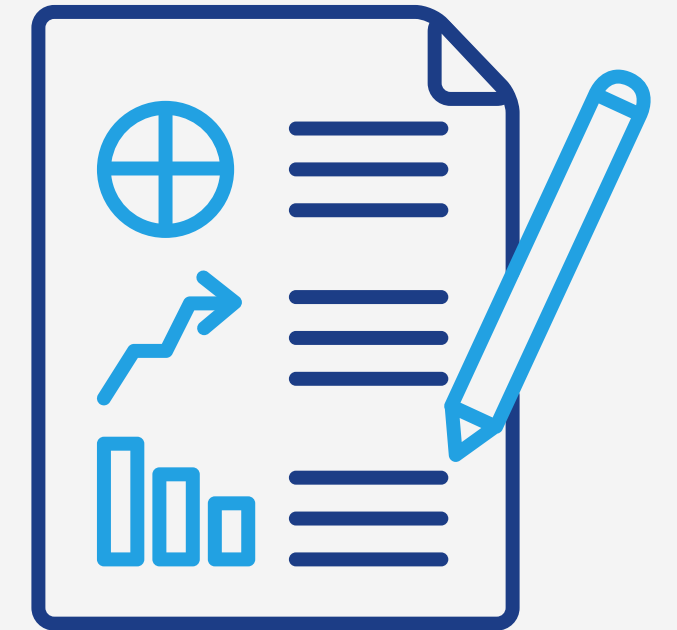
# Problem Statement

Sales management has gained importance to meet increasing competition and the need for improved methods of distribution to reduce cost and to increase profits. Sales management today is the most important function in a commercial and business enterprise.

The objective of this project is to analyze Amazon sales data to identify trends in monthly and yearly sales, understand profit trends, and visualize the performance over time. The insights gained from this analysis can inform strategic decisions and provide valuable information for stakeholders.



# Data Exploration and Preparation




## Data Source


The dataset used in this analysis is the "**Amazon Sales Data.csv**" file, containing information about sales transactions.

## Data Cleaning and Preprocessing

- Extracted relevant features such as 'Order Date,' 'Year,' 'Month,' 'Year-Month,' and 'Month Year.'
- Handled datetime data conversion and formatting.
- Applied ETL principles for data cleaning and transformation.

# Exploratory Data Analysis





## Monthly Sales Trend

- Grouped data by month and calculated total revenue.
- Visualised monthly sales trends using a line plot.

## Yearly Sales Trend

- Grouped data by year and calculated total revenue.
- Visualised yearly sales trends using a bar chart.

## Yearly - Monthly Sales Trend

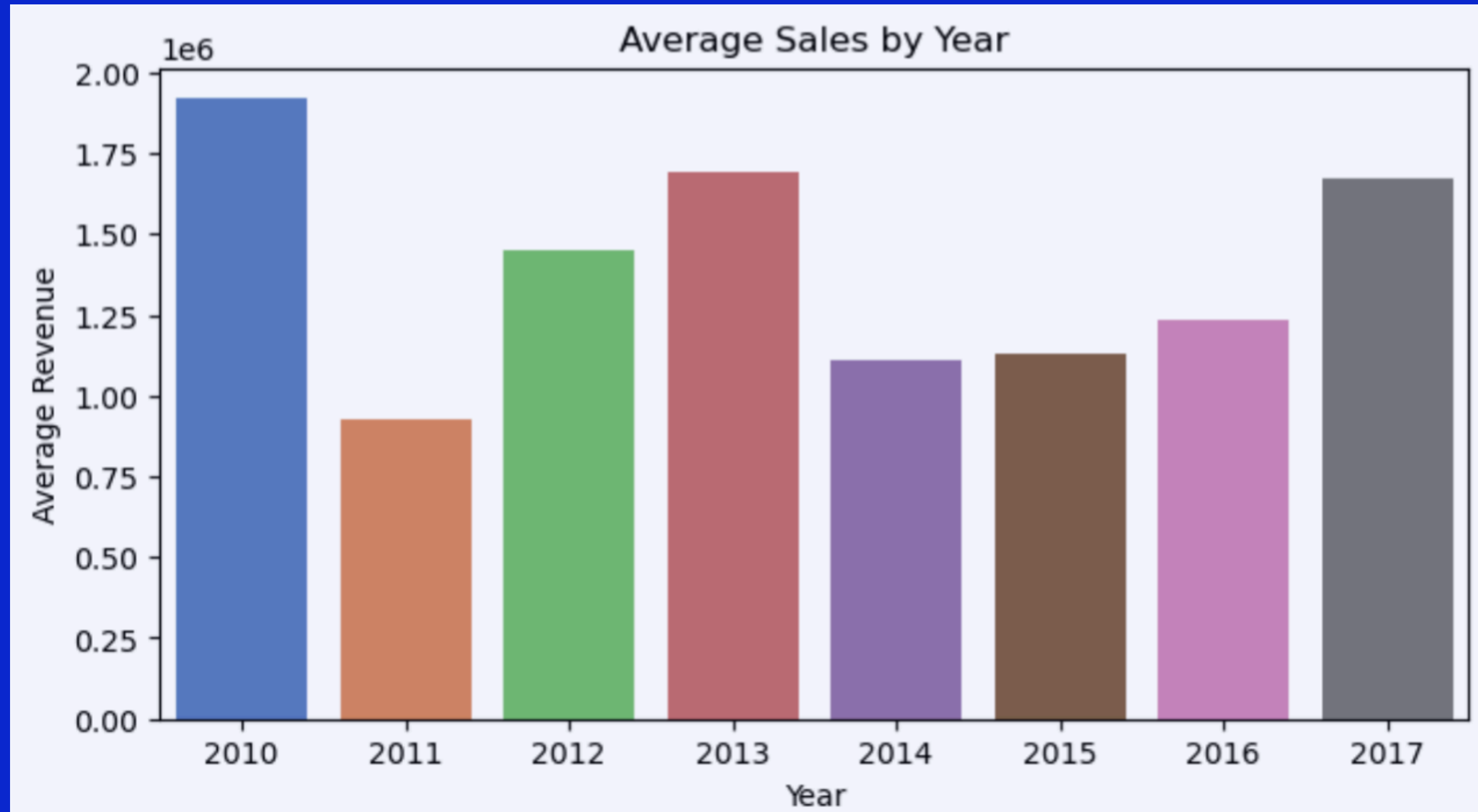
- Grouped data by month and calculated total revenue.
- Visualised monthly sales trends using a line plot.

## Profit Trend

- Grouped data by month-year and calculated total profit.
- Visualised profit trends using a line plot.
- Analysed yearly and monthly profit trends separately.

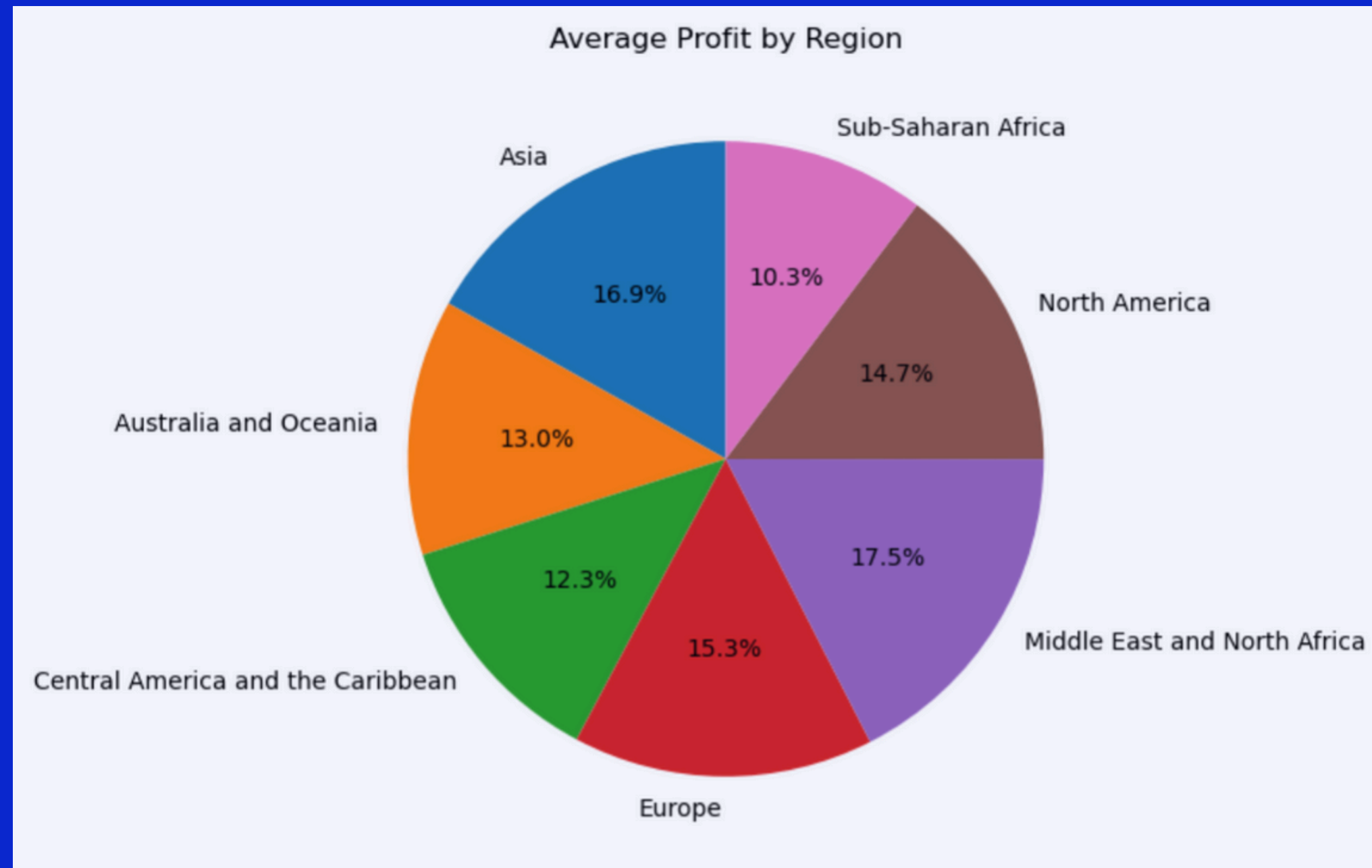
# Results

## AVERAGE SALES PER YEAR



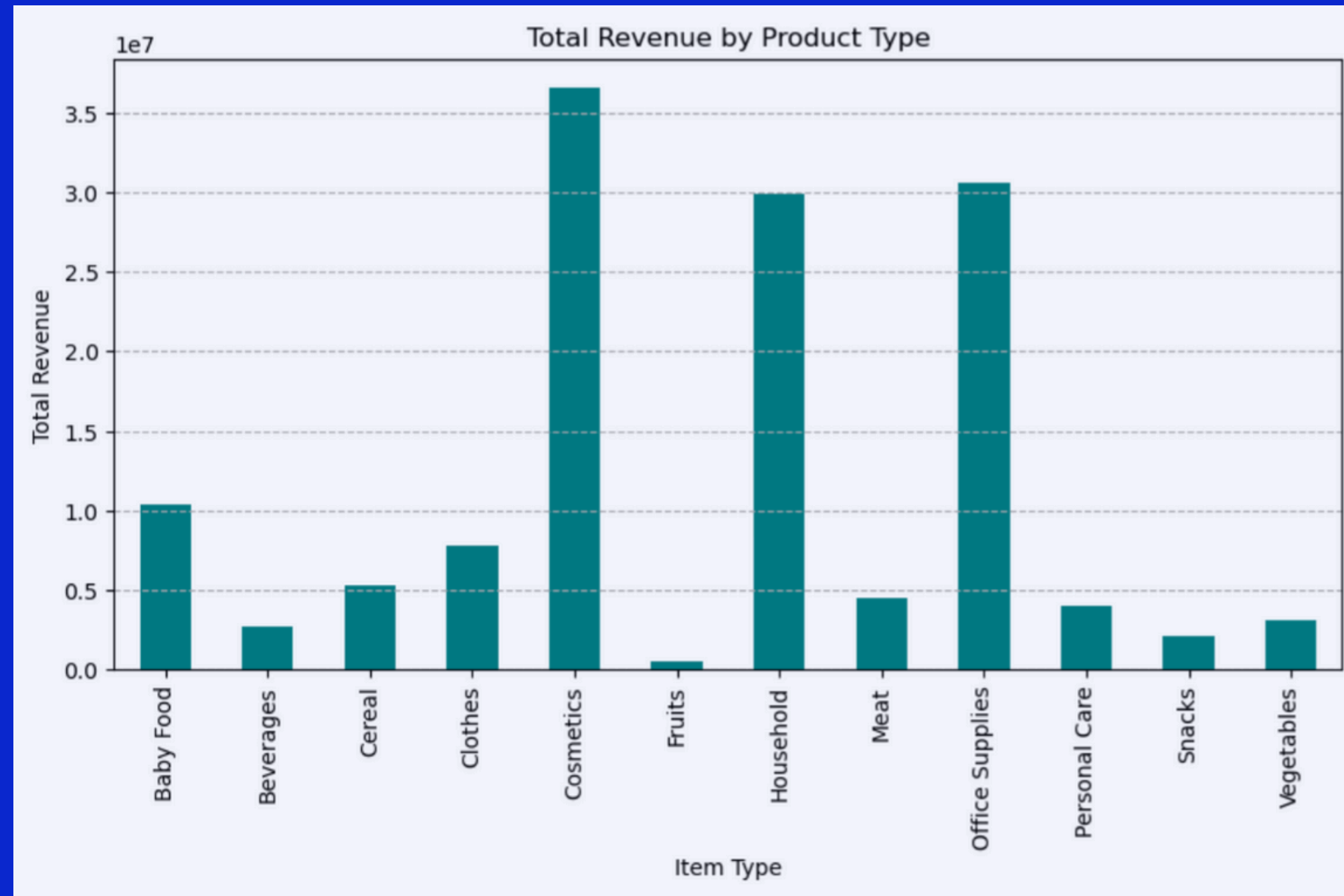
# Results

## AVERAGE PROFIT BY REGION



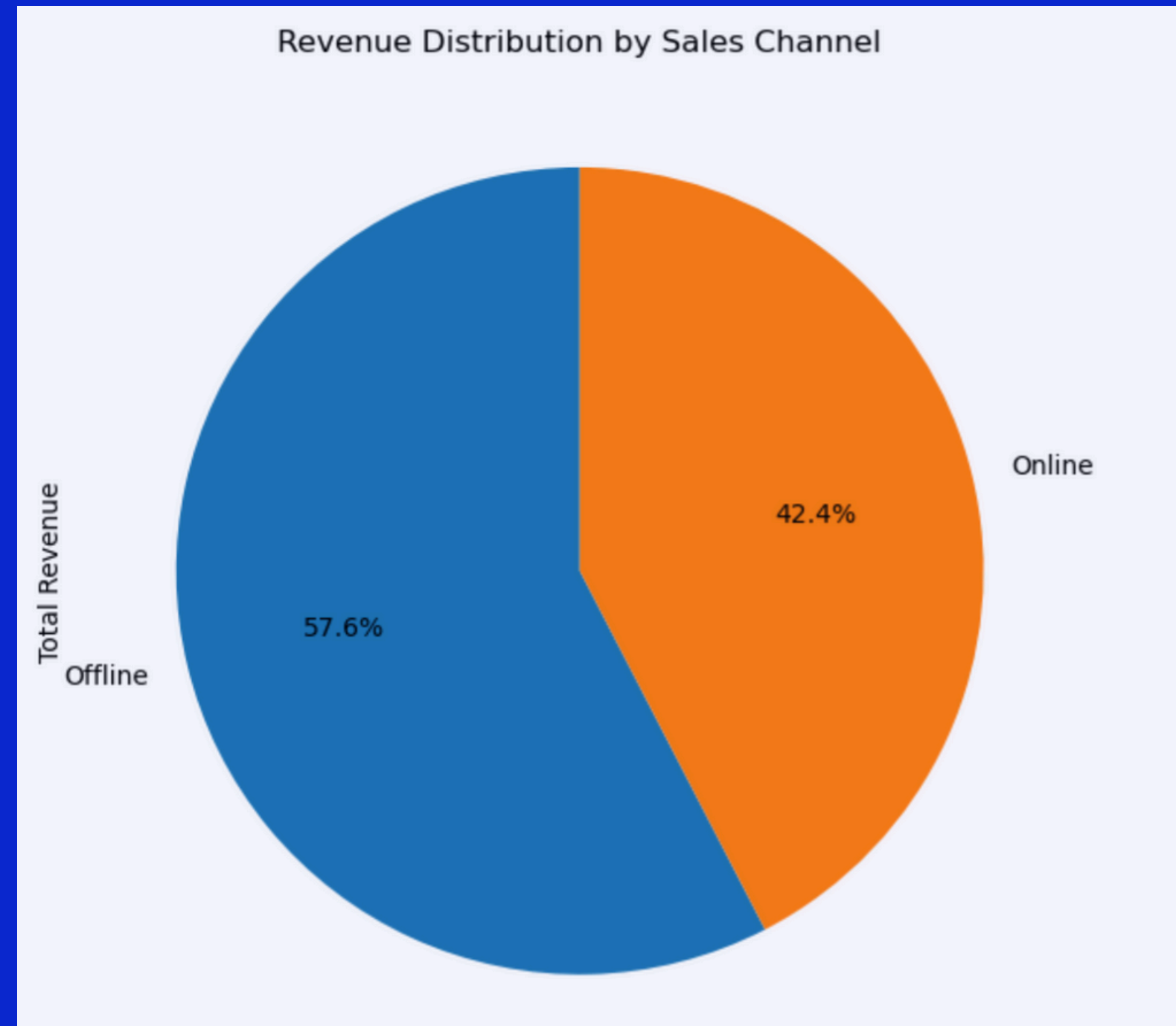
# Results

## TOTAL REVENUE BY ITEM TYPE



# Results

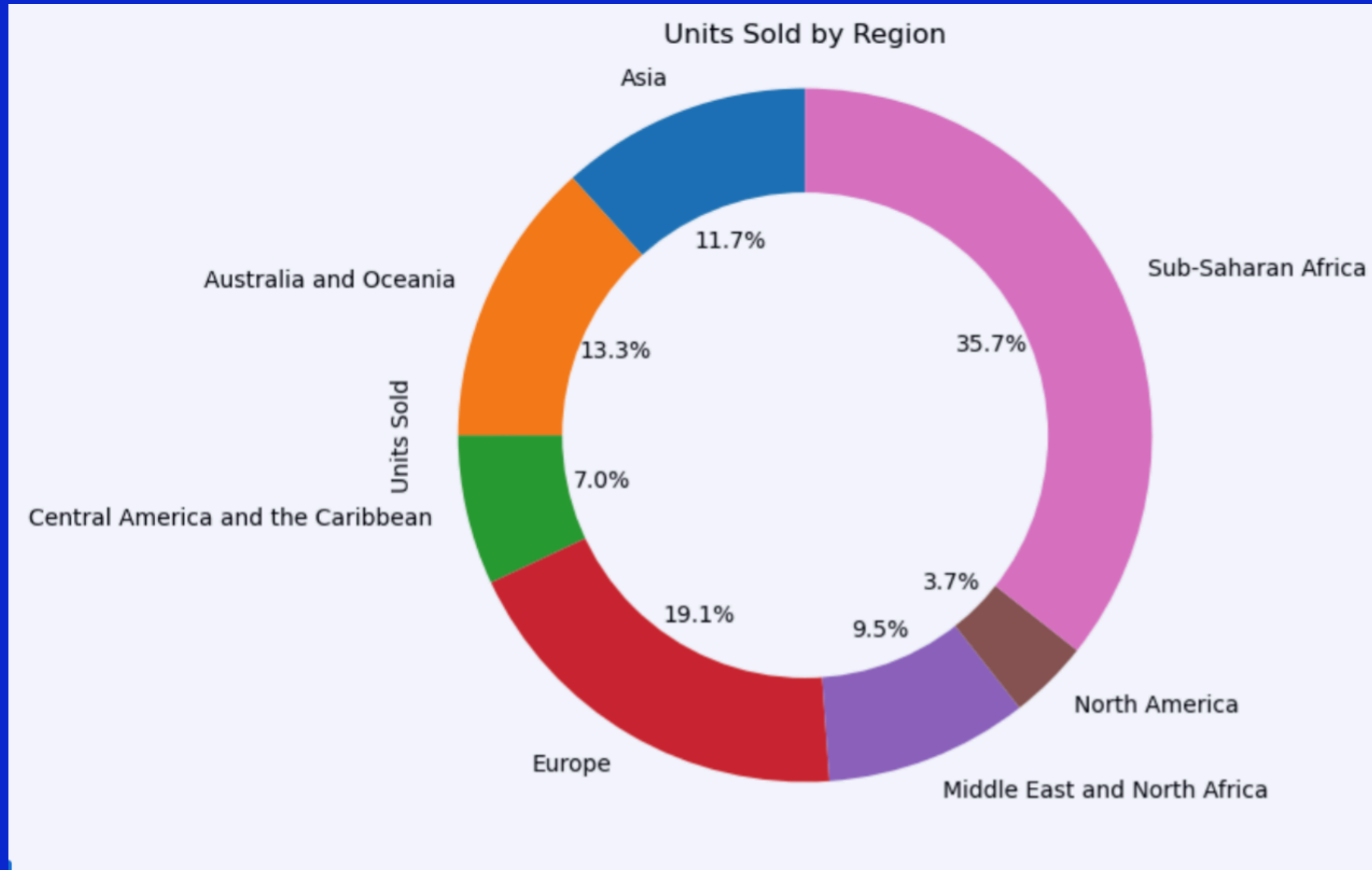
## REVENUE DISTRIBUTION BY SALES CHANNEL





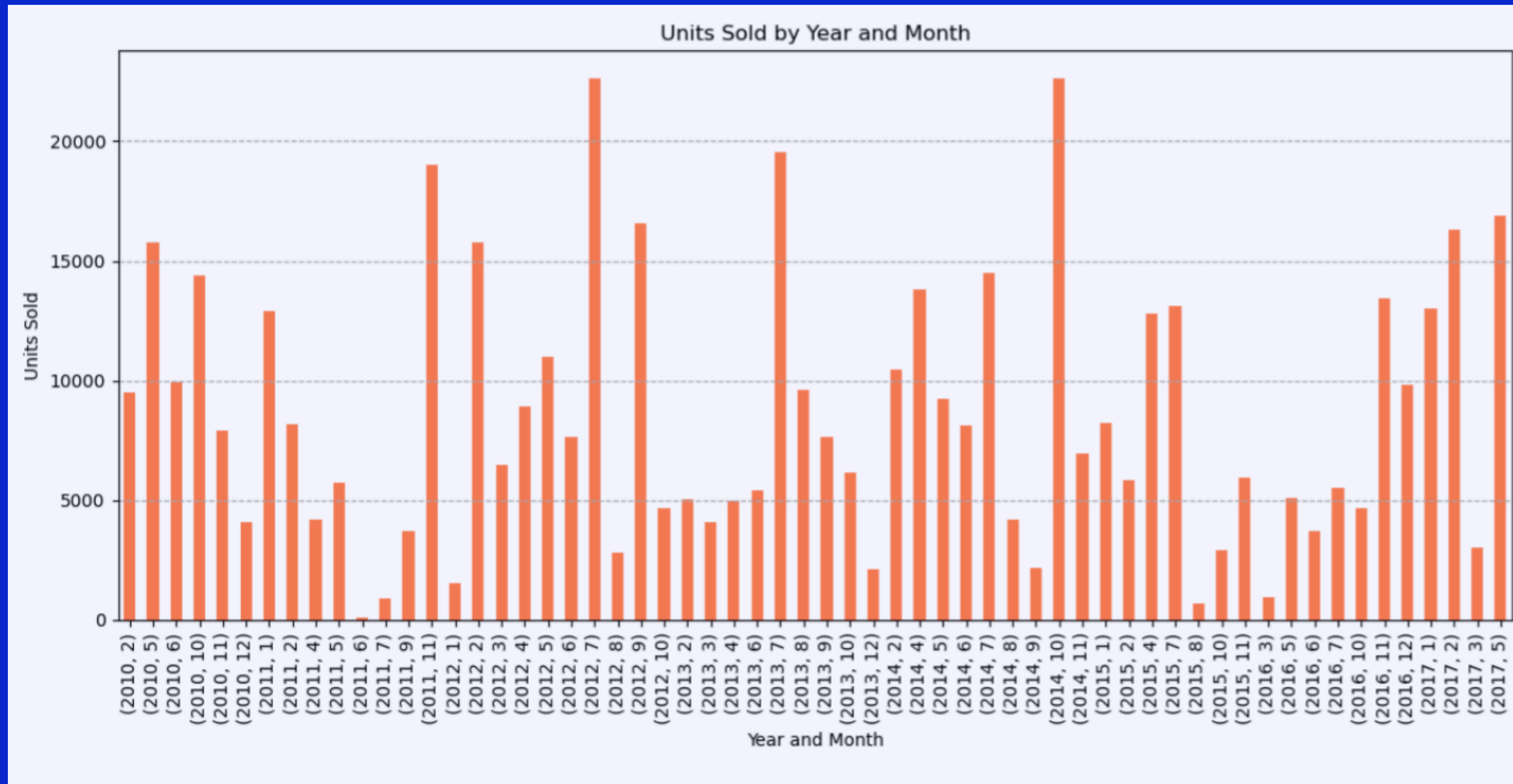
# Results

## UNITS SOLD BY REGION



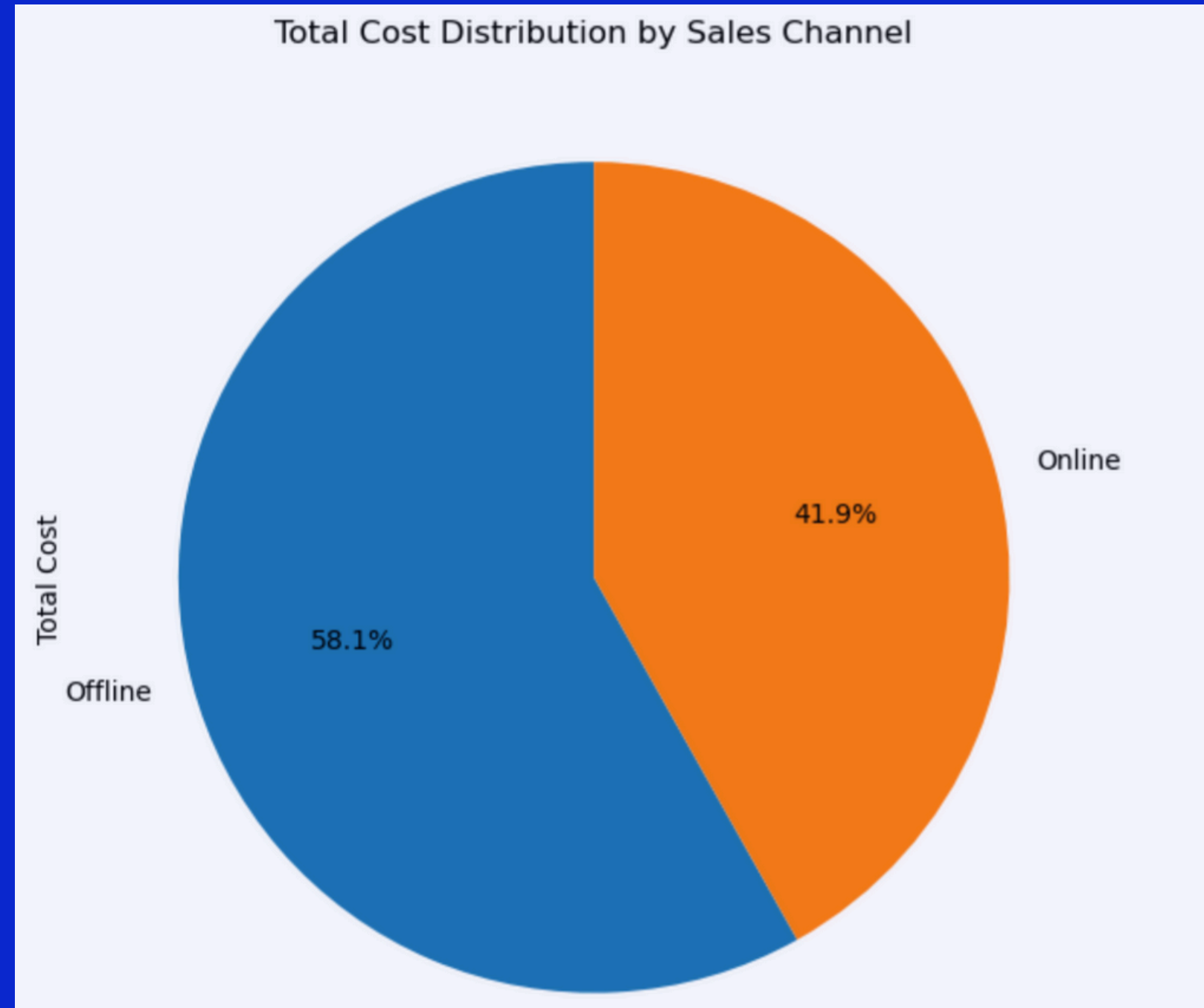
# Results

## UNITS SOLD BY YEAR AND MONTH



# Results

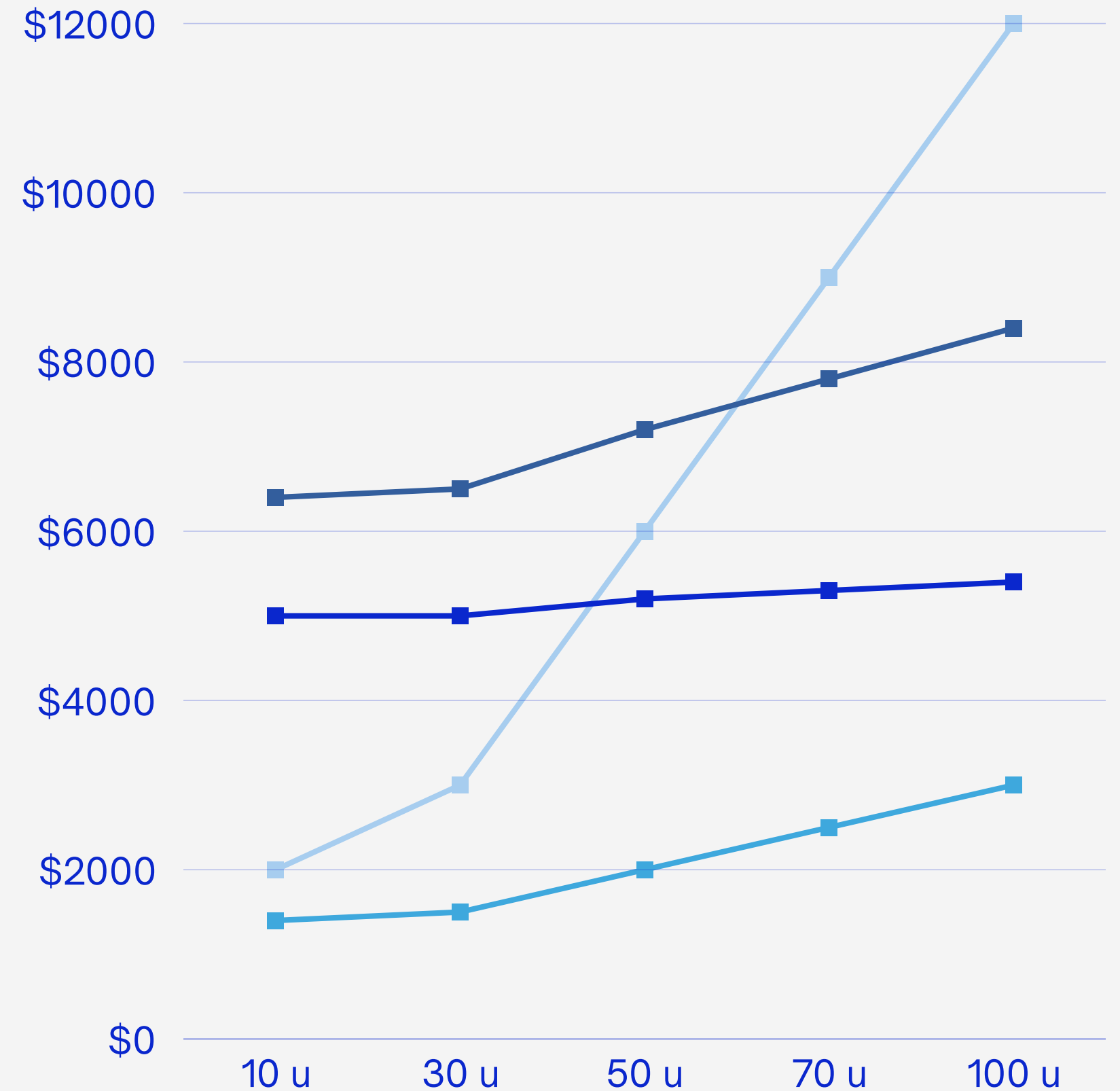
## TOTAL COST BY SALES CHANNEL



# Conclusion

This project successfully analysed Amazon sales data, providing valuable insights into monthly and yearly trends and profit distributions.

The visualisations and trends identified can be instrumental in making informed business decisions and developing strategies for future growth.



**THANK YOU**