



# **Amazon Sales Data Analysis**



BY DEV VORA



# Objectives

- Total Sales and Total Profit by Region
- Yearly Total Sales
- Total Sales, Total Profit, Average Profit Margin, and Average Unit Price
- Bestseller Item Type
- Mode of Channel Generating Maximum Sales
- Order Priority with Highest Sales
- Number of Units Sold of a Particular Item Type

# The Procedure to be followed

- Data Collection
- Data Cleaning
- Data Analysis
- Insights
- Summary

# Data Collection

The Data has been collected in the form CSV file.

The CSV file has the data of sales of products during the span of 2010 – 2017.

# Data Cleaning

There were no Null values or blank fields

There were some values in 'Order Date' and 'Ship Date' having String datatype. So we converted them to datetime.

the values in 'Total Revenue', 'Total Cost' and 'Total Profit' columns are written with two decimal places, so checked that each value in these columns have two decimal places.

# Data Analysis

137.35M

Total Sales

44.17M

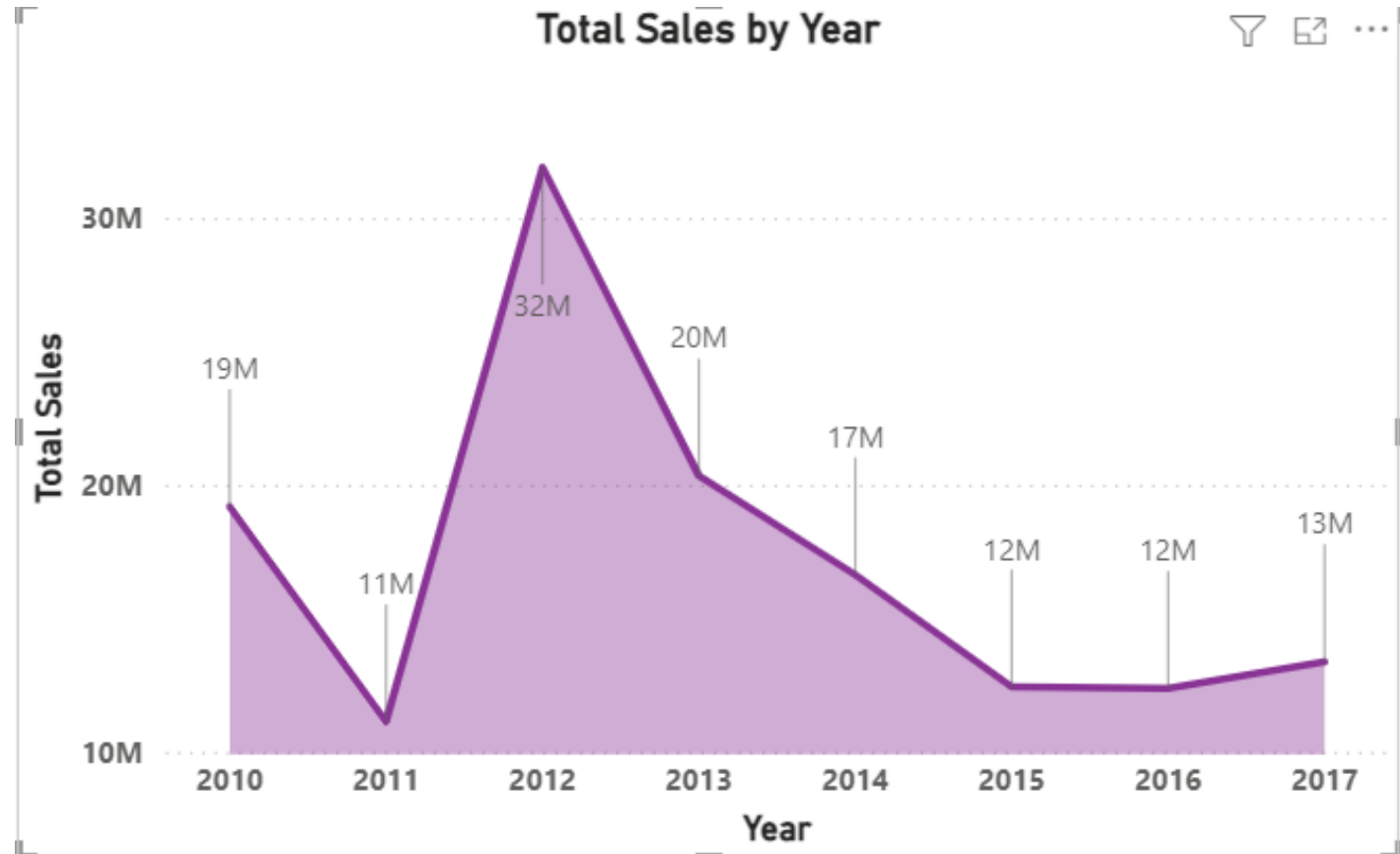
Total Profit

32.16

Avg Profit Margin

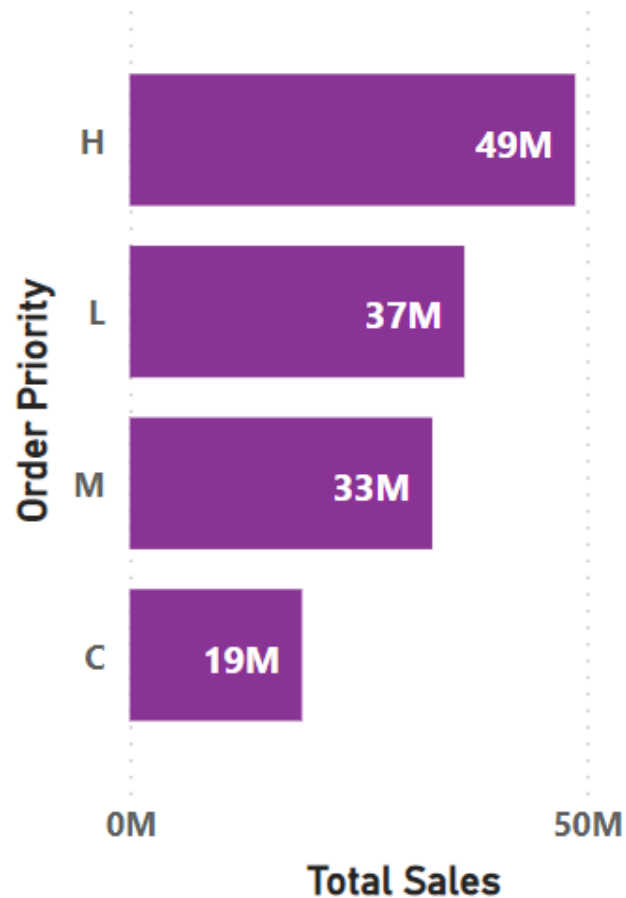
276.76

Avg Unit Price

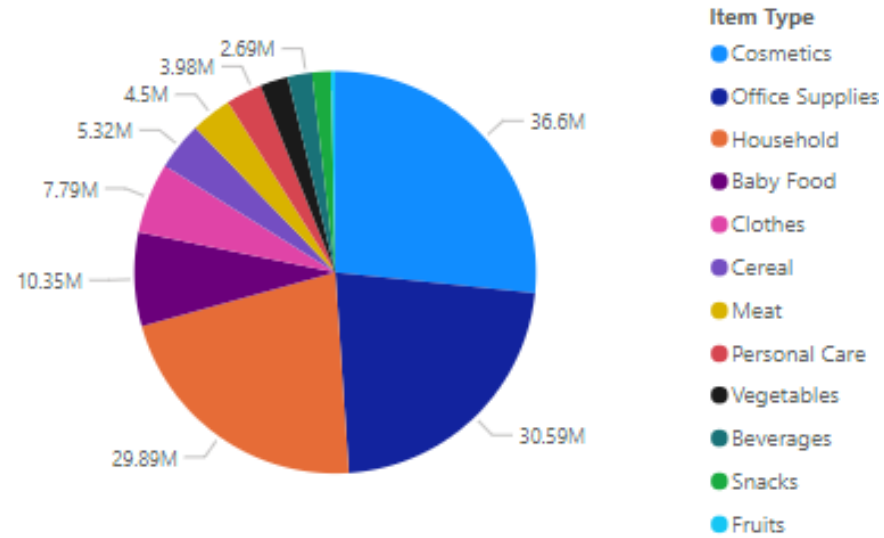


# Data Analysis

## Total Sales by Order Priority



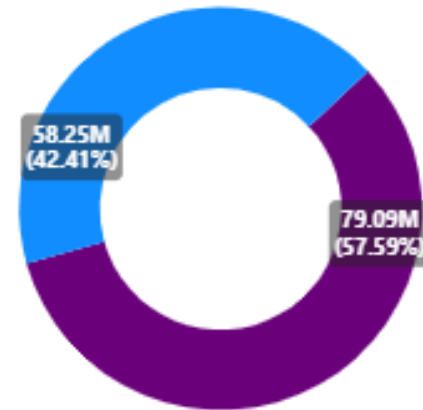
## Total Sales by Item Type



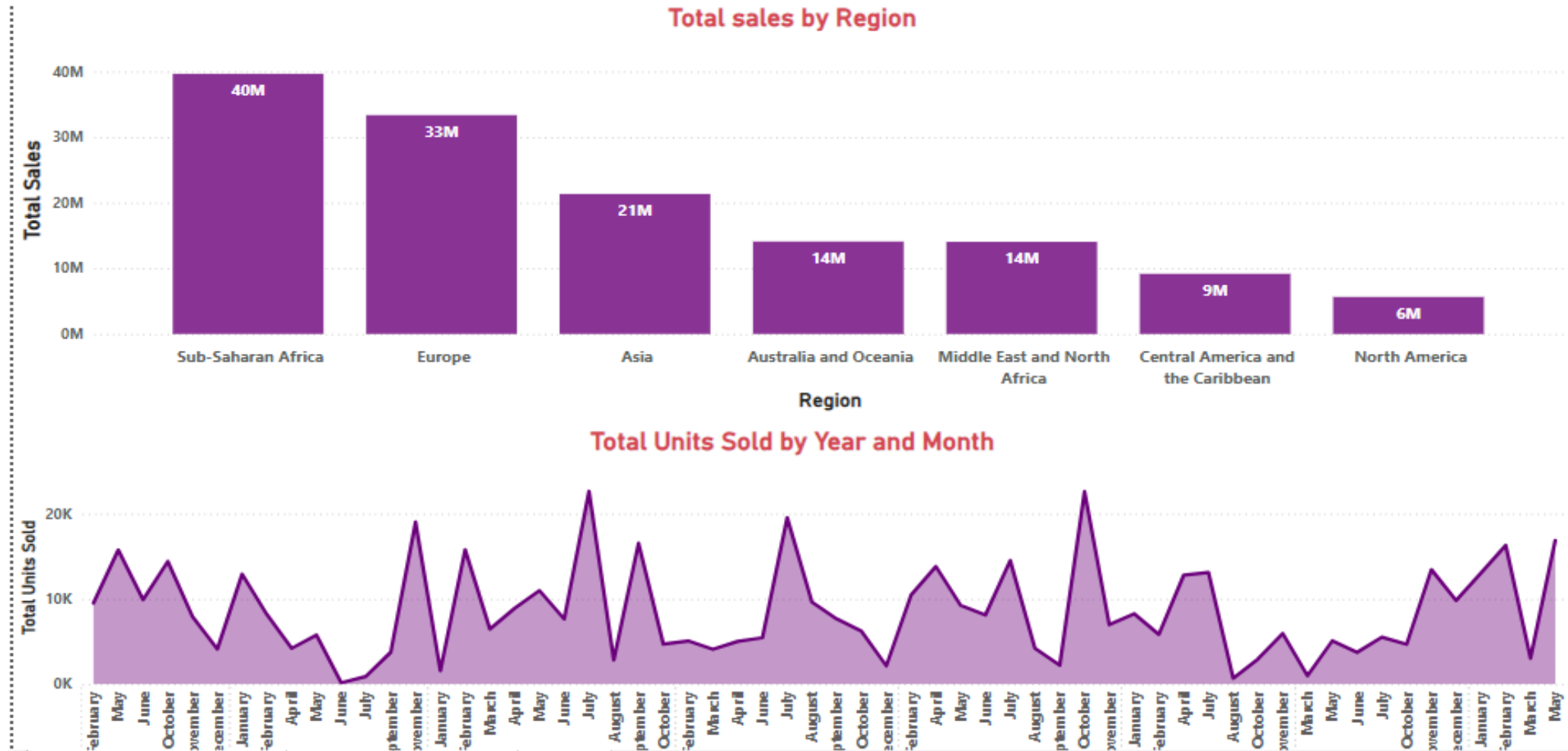
## Total Sales by Channel

Sales Channel

- Offline
- Online

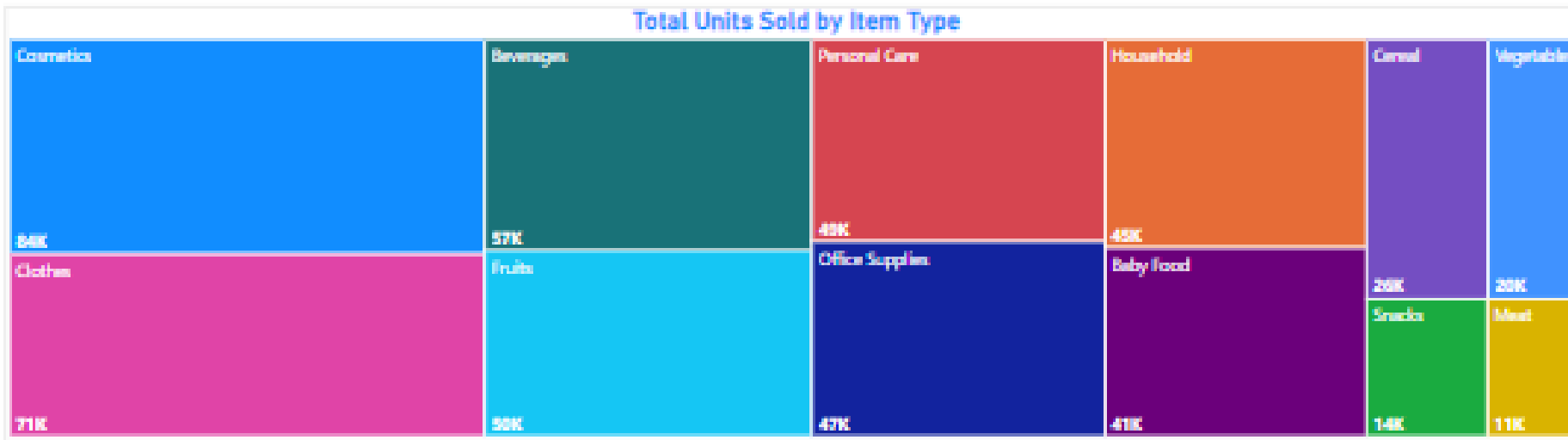
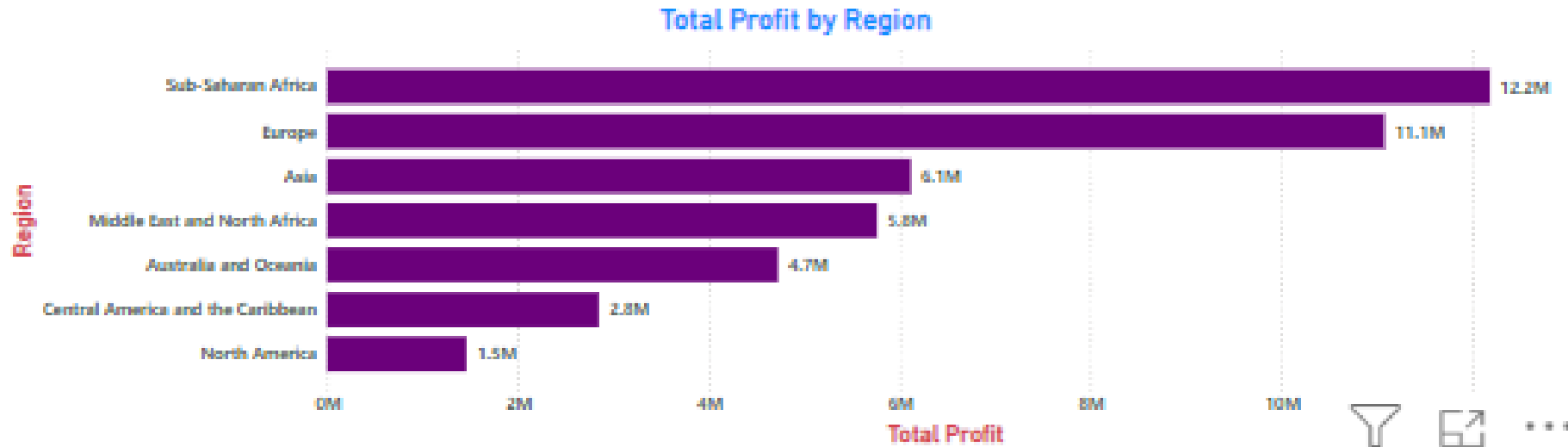


# Data Analysis



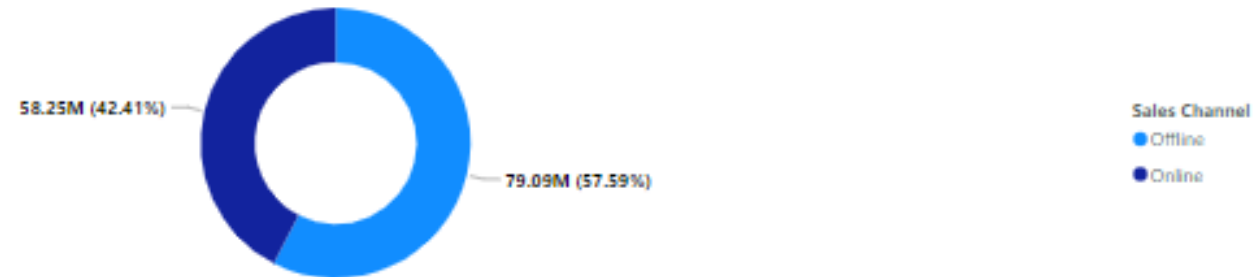


# Data Analysis

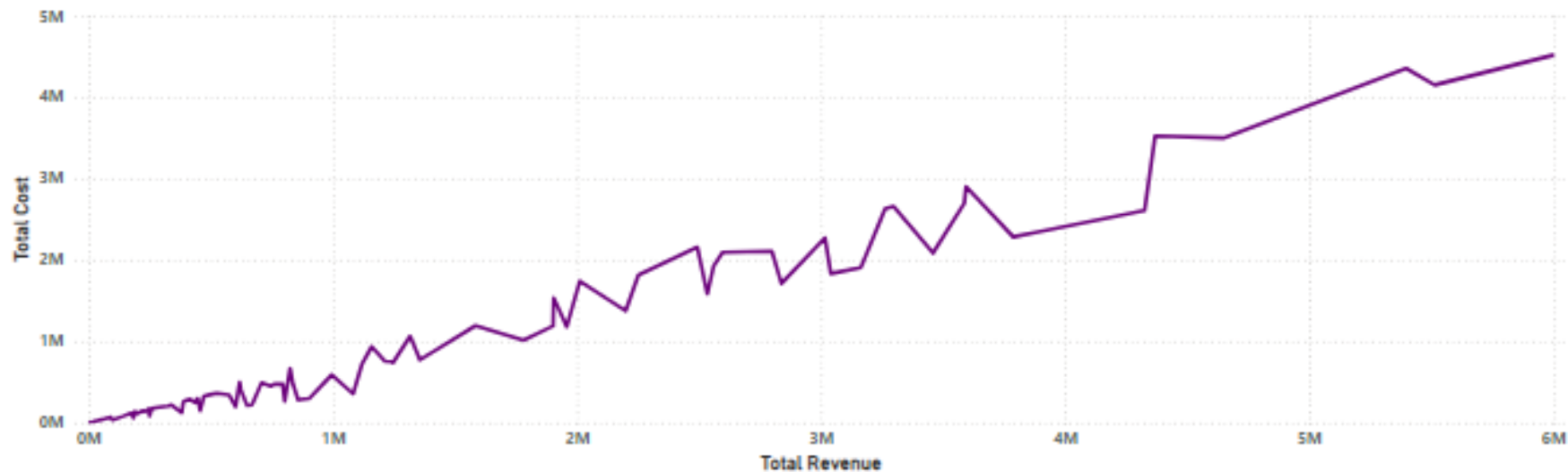


# Data Analysis

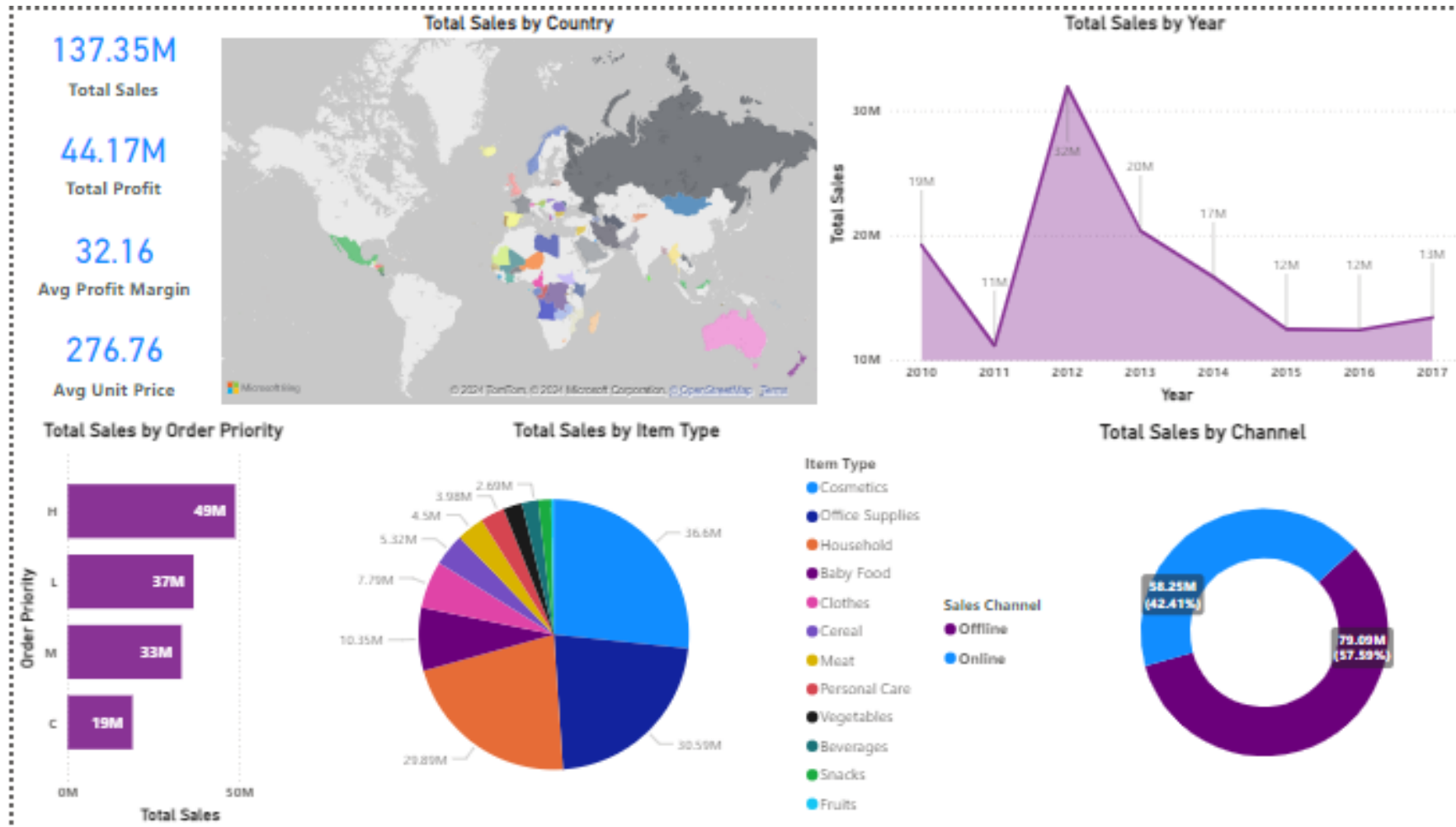
Total Sales performance by Channel



Total Cost by Total Revenue



# Dashboard (whole)



# Insights

- The year 2012 has seen the highest sales.
- The Sub-Saharan Africa region has seen the highest sales.
- "H" order priority gave the highest sales, indicating a demand for fast product delivery.
- Majority of people still prefer "Offline Channel" for buying products.
- "Cosmetics" products gave the highest sales.
- The total sales is \$137.35 million out of which total profit is \$44.17 million.
- The average profit margin and unit price is \$32.16 and \$276.76 respectively.

# Summary

- "Cosmetic" products are particularly popular in Europe, generating the highest profit of \$14.56 million. It's recommended to focus marketing campaigns on promoting these products further.
- Although the total population of North America prefers offline shopping, the majority of profits come from the online channel. Therefore, it's advisable to prioritize online promotion strategies to capitalize on this trend.
- Sub-Saharan Africa emerges as the region with the highest profit, primarily driven by the sale of fruits, with approximately 31 thousand units sold. Campaigns should emphasize the health benefits of fruits and align marketing with local preferences.
- Following cosmetics, the second most purchased item in Europe is baby food. This suggests a significant portion of the European population consists of newlywed couples. Thus, promoting products related to newborns could effectively target this demographic.

# Summary

- North America Region has generated the least profit by selling only Personal Care and Household Items through Offline Channel. It's advisable to promote products other than both these item types through the Online Channel by offering discounts. Conduct surveys to understand local preferences better.
- "Fruits" have generated the least profit of all item types, totaling only \$120.50 thousand. It's recommended to analyze customer needs, adjust prices, and tailor offerings to local preferences.
- Household Items and Cosmetic Products are sold the most through Offline and Online Channels respectively. To capitalize on this trend, enhance physical stores with attractive displays and promotions for Household Items. Additionally, run targeted ads and improve website usability for Cosmetic products.
- Meat is the least sold item type with 11 thousand units sold in Australia and Oceania and Sub-Saharan Africa Region using only the Online Channel. Consider diversifying meat product offerings and adjusting prices to stimulate sales.



**Thank you**