



# Amazon Sales Analysis

By Vishal, Sam and Raja  
Last updated: 20-05-2023

# Technologies: Business Intelligence

## Domain: E-commerce

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.

# Tools Used :

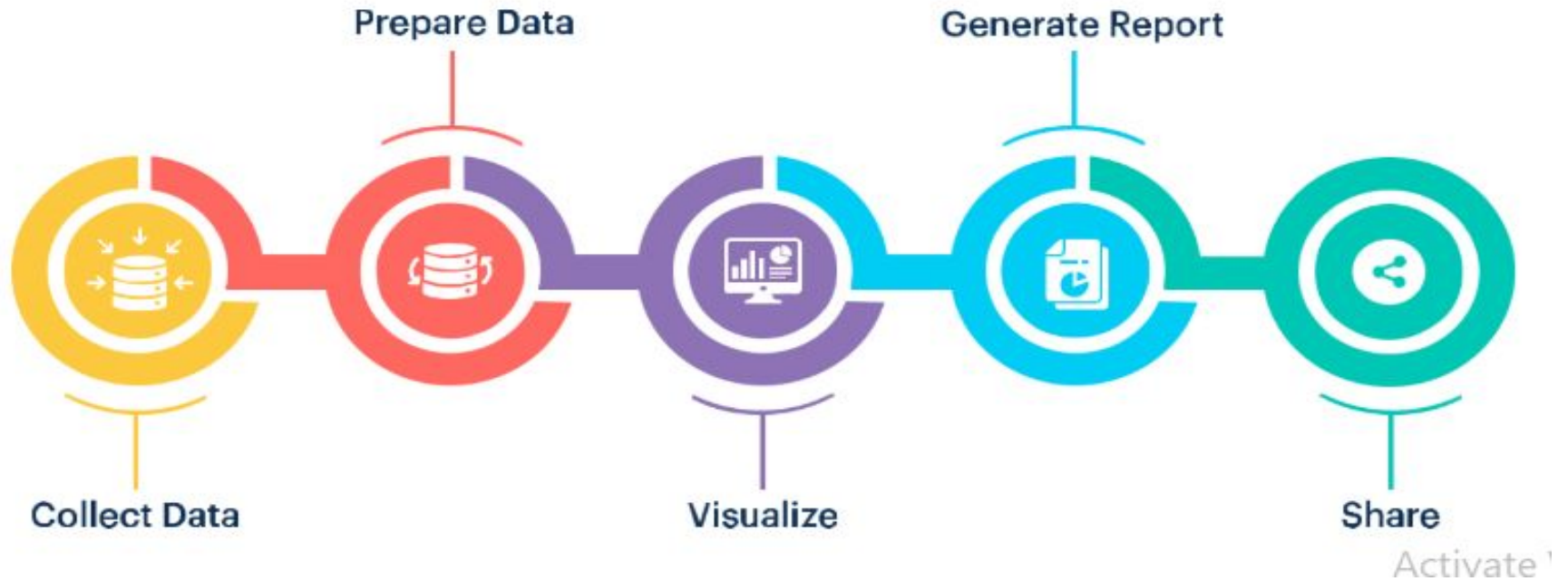
Python, Jupyter Notebook and PowerBI.



Power BI Desktop



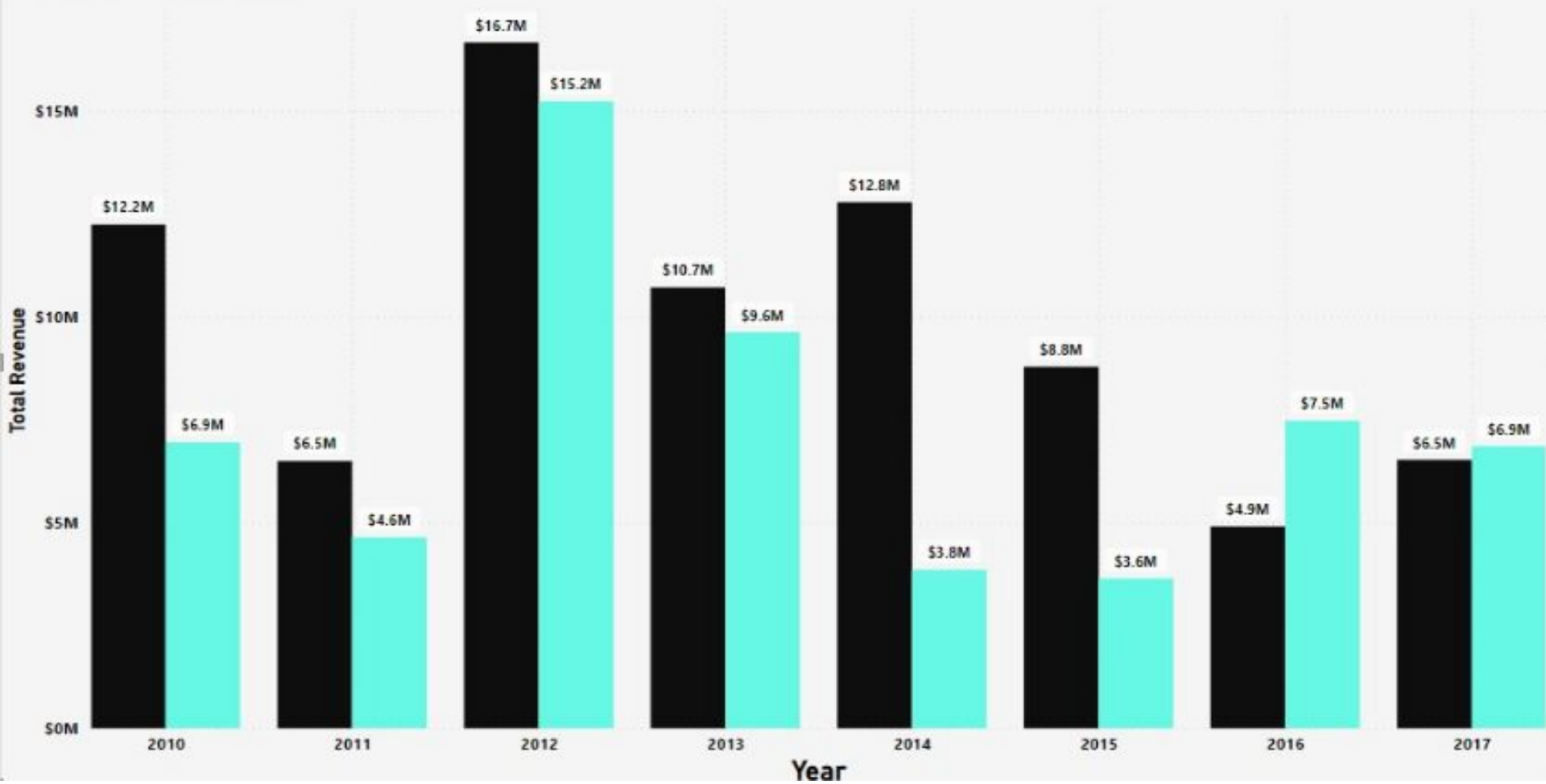
# Design



Total Yearly Revenue by Sales Channel



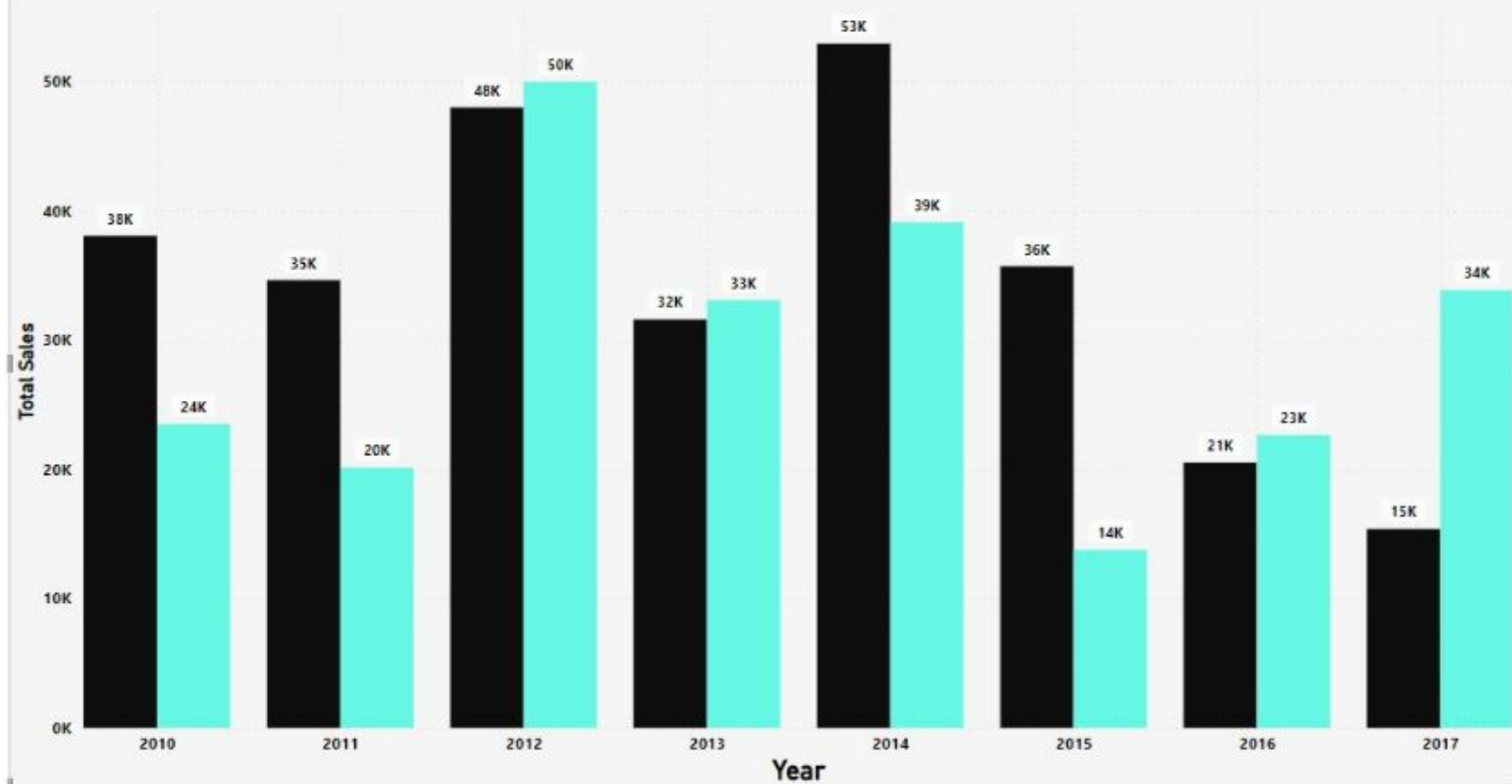
Sales Channel ● Offline ● Online



Total Yearly Sales by Sales Channel

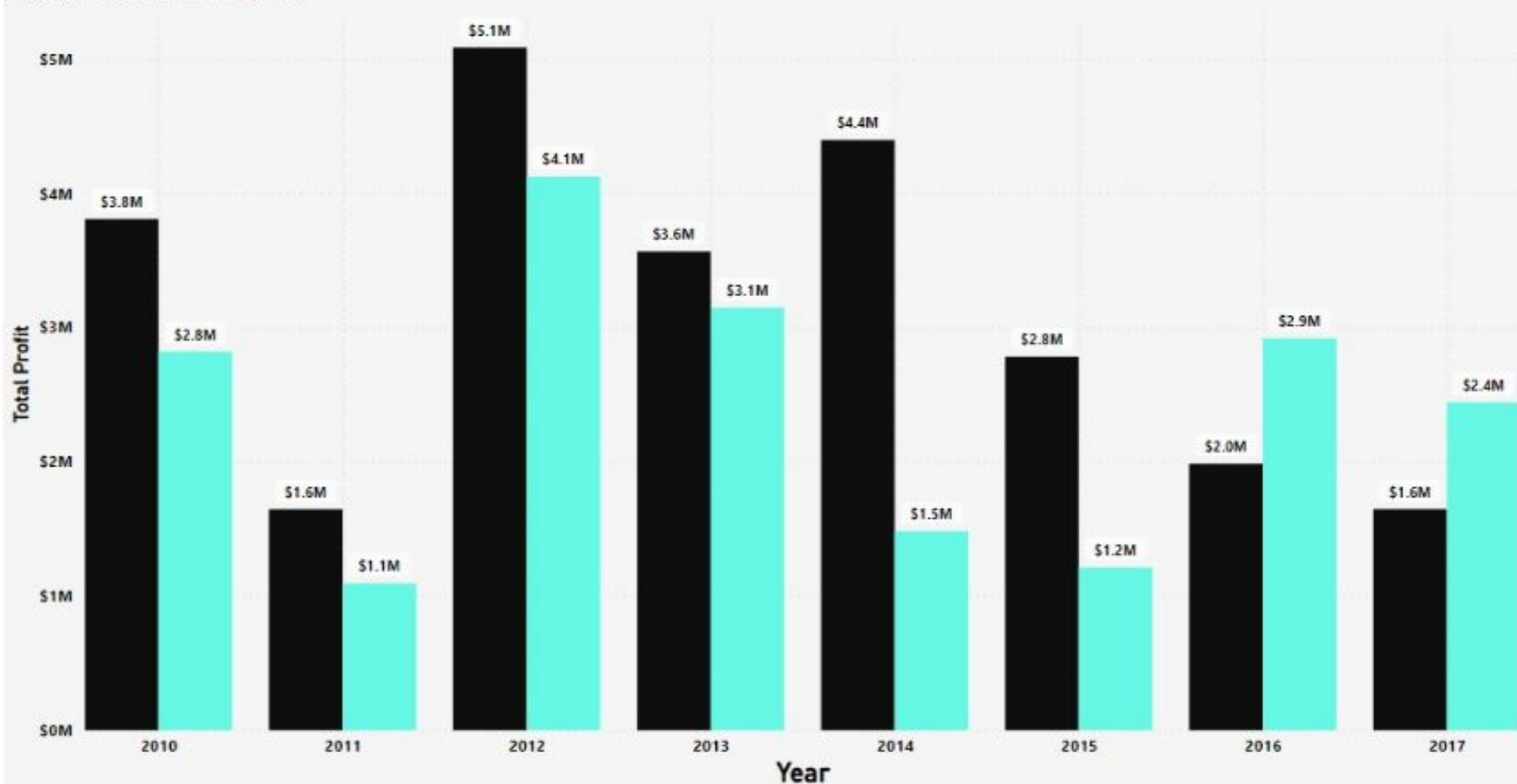


Sales Channel ● Offline ● Online



Total Yearly Profit by Sales Channel

Sales Channel ● Offline ● Online

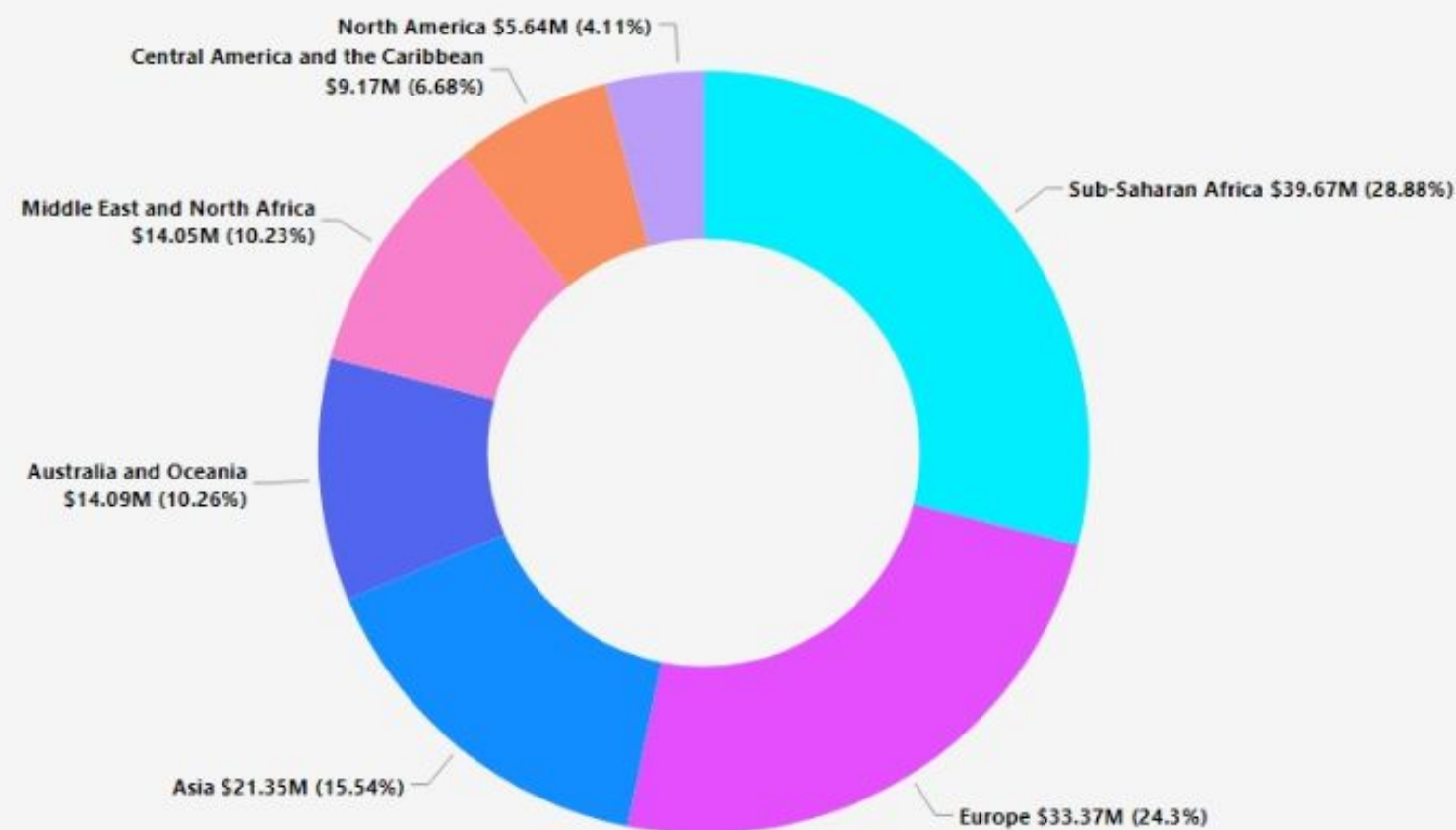


# Insights

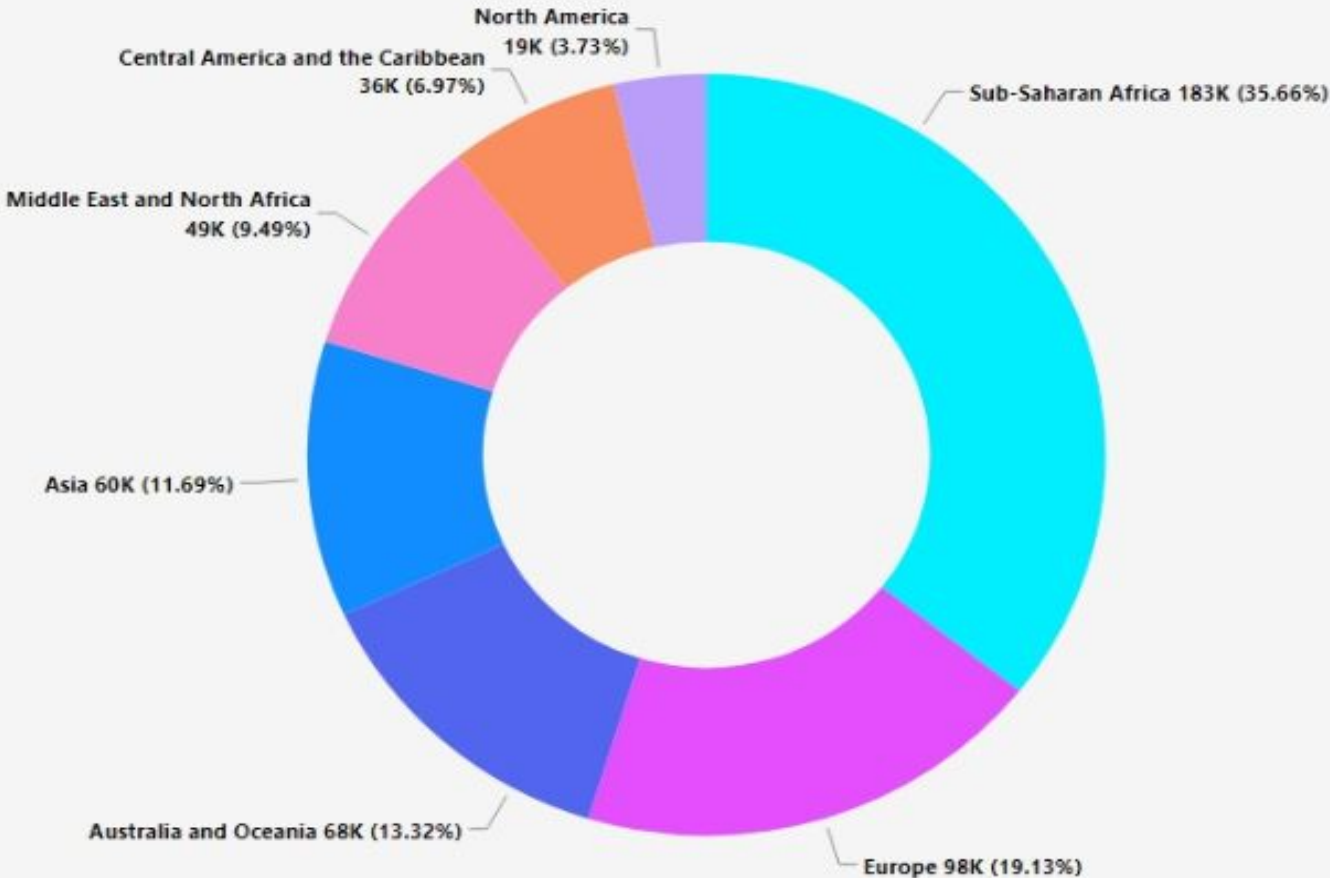
- The majority of our profit, revenue, and sales come from our offline channel.
- "Our highest revenue and profit year was in **2012**, with a total revenue of (**135.2**) million dollar and a profit of (**\$9.2**) million."
- From **2010** to **2012**, we experienced an increase in revenue, sales, and profit. However, from **2014** to **2017**, we experienced a decline in these metrics.



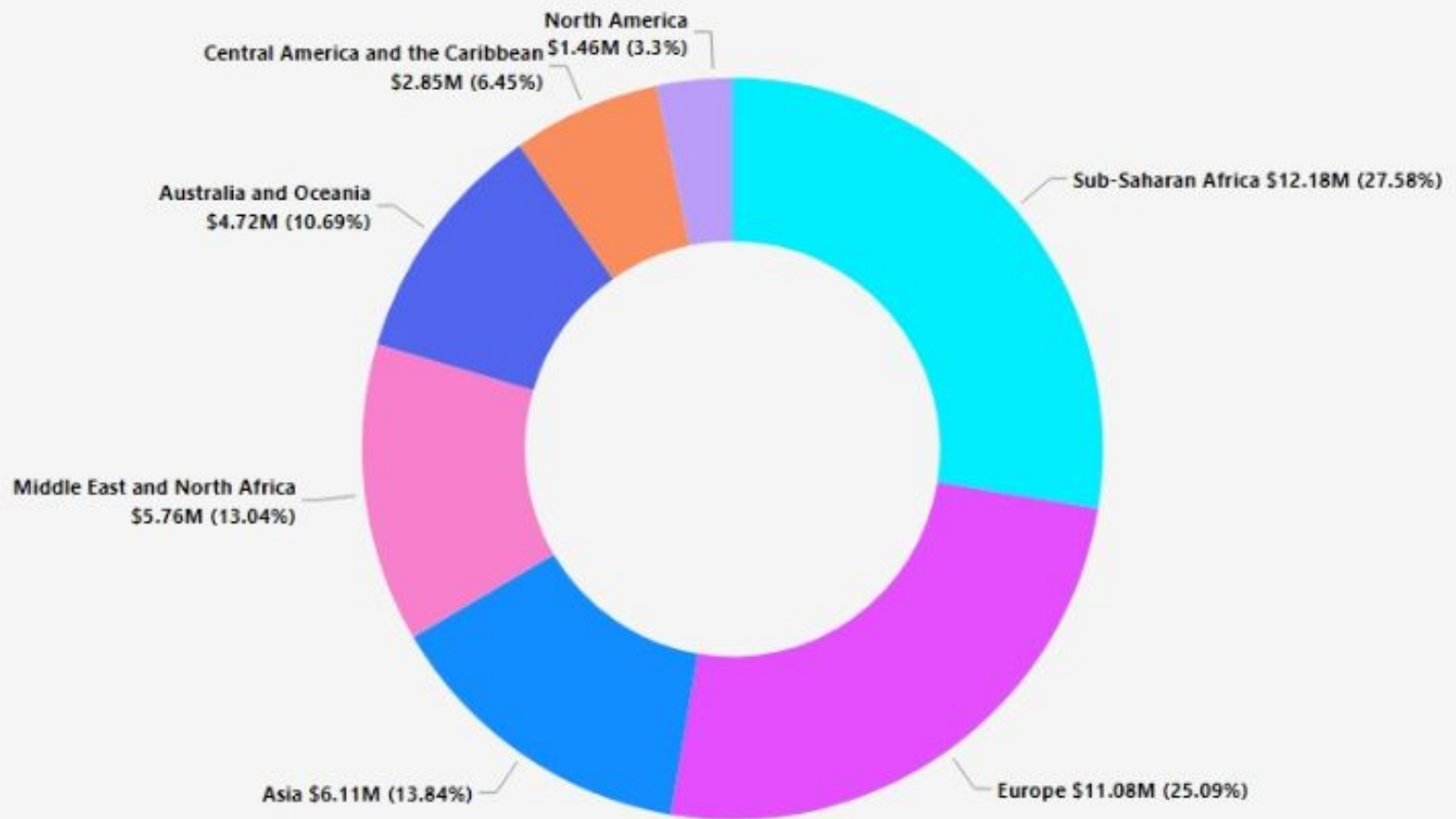
Revenue by Region (2010-17)



**Sales by Region (2010-17)**



Profit by Region (2010-17)



# Insights

- The **Sub-Saharan Africa** region was the most sales, profitable, and revenue generated region, contributing:

**35.6%** in total sales

**27.58%** in total profit

**28.88%** in total revenue

- The second most sales, profitable, and revenue generated region was Europe, which contributed:

**19.13%** in total sales

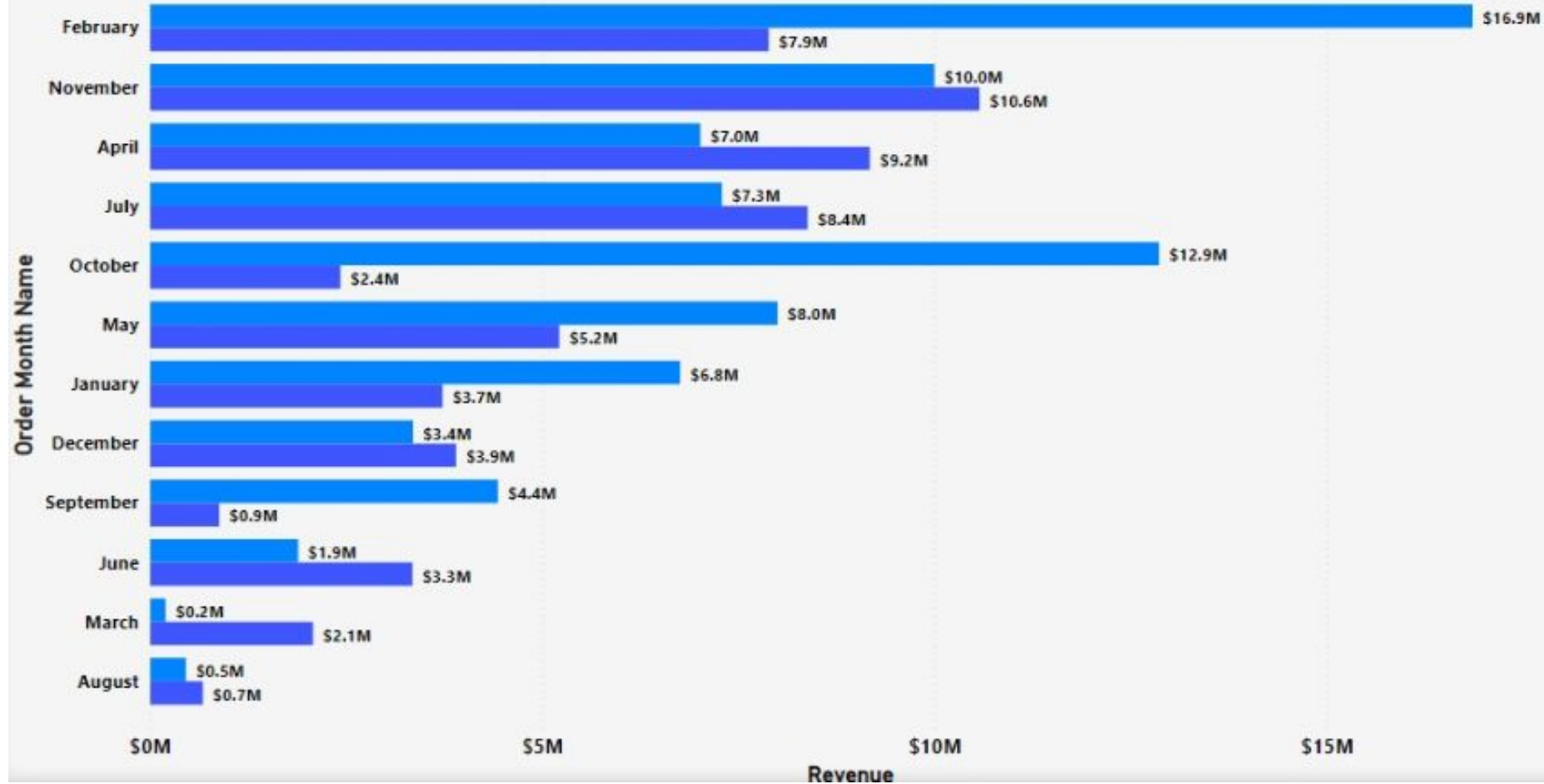
**25.09%** in total profit (fairly close to Sub-Saharan Africa)

**24.3%** in total revenue.

- **Europe** is the most Profitable region in terms of its sales.

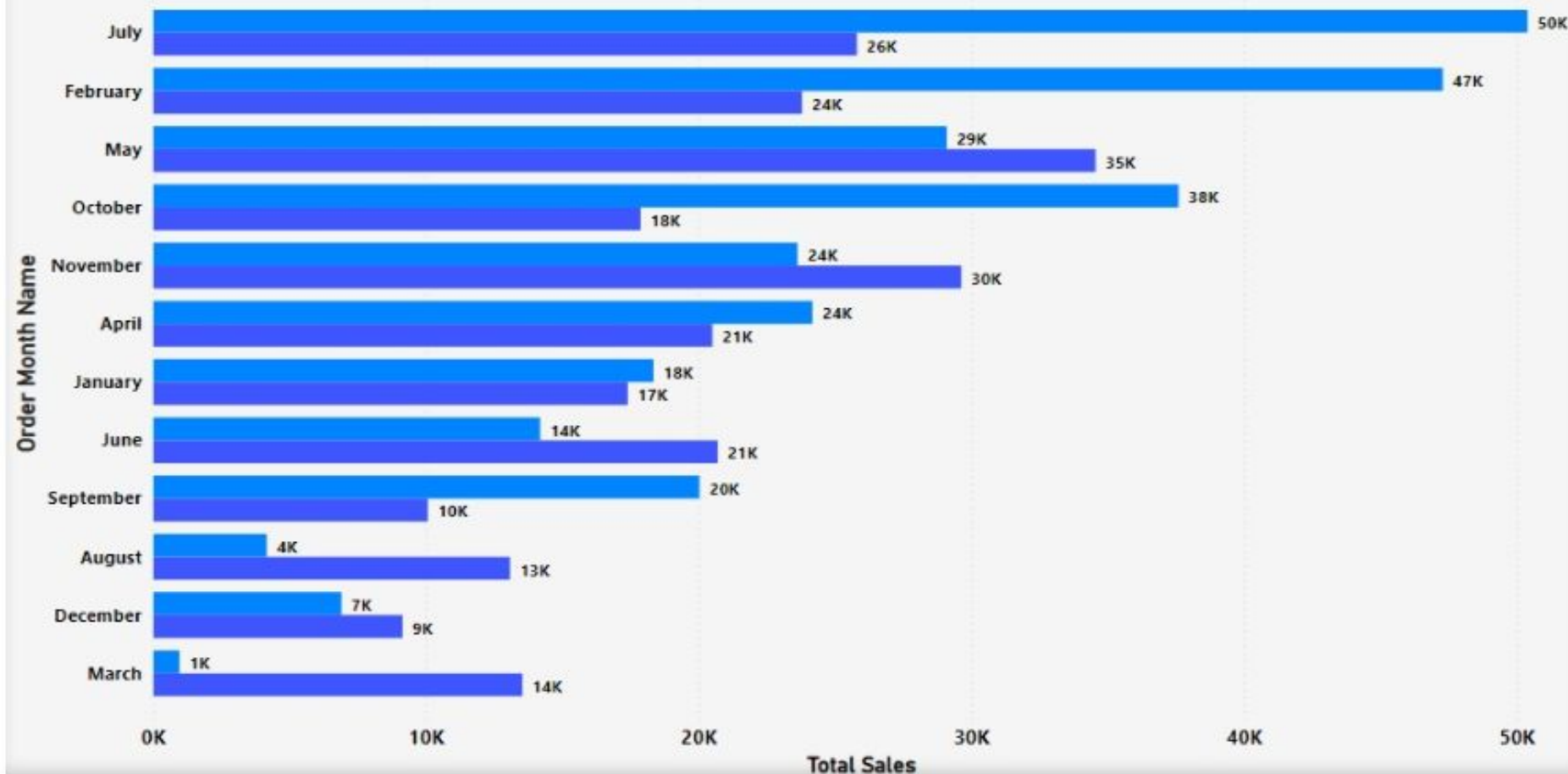
# Monthly Revenue by Sales Channel (2010-17)

Sales Channel ● Offline ● Online



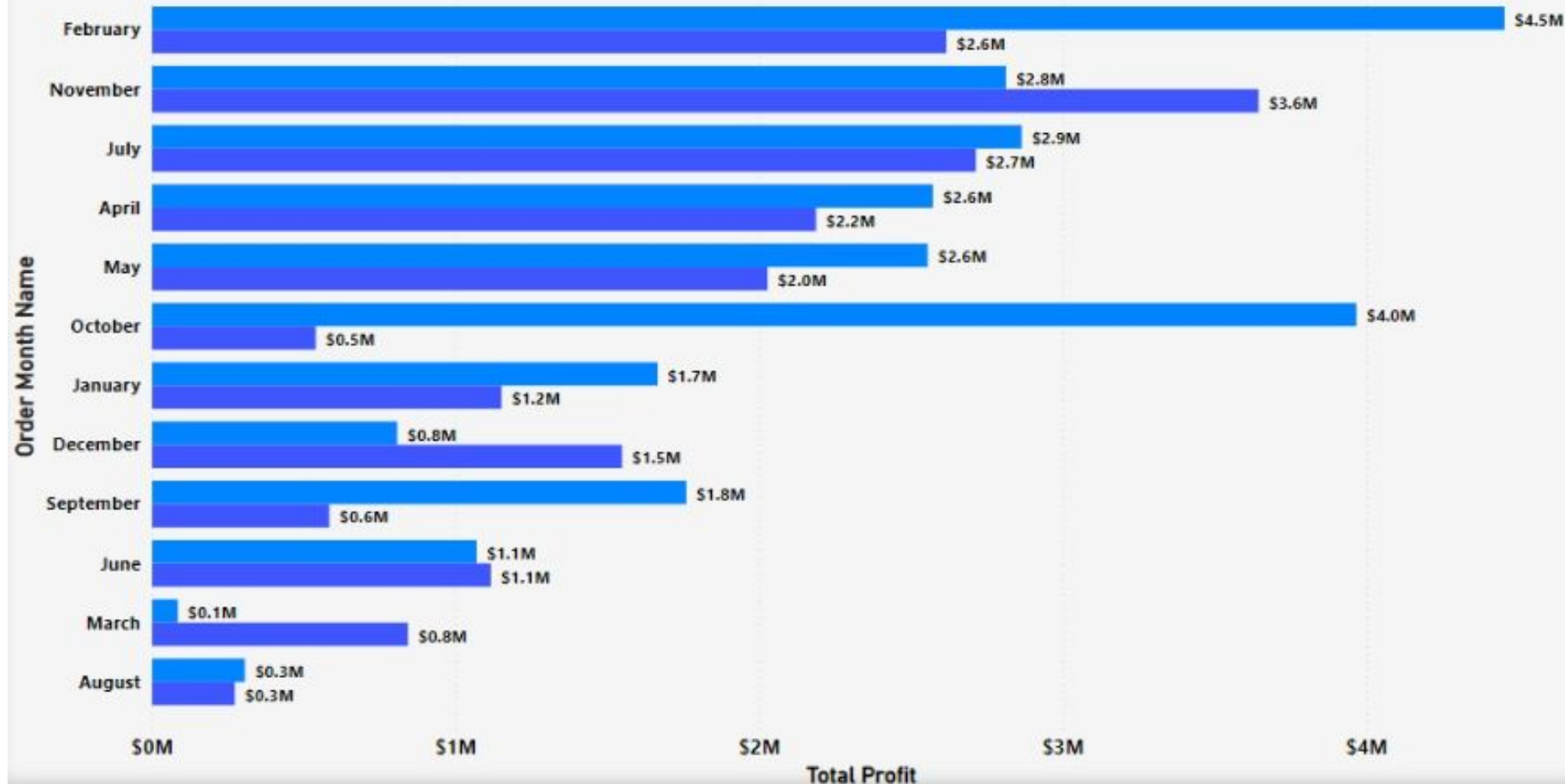
# Mothly Sales by Sales Channel (2010-17)

Sales Channel ● Offline ● Online



# Monthly Profit by Sales Channel (2010-17)

Sales Channel ● Offline ● Online



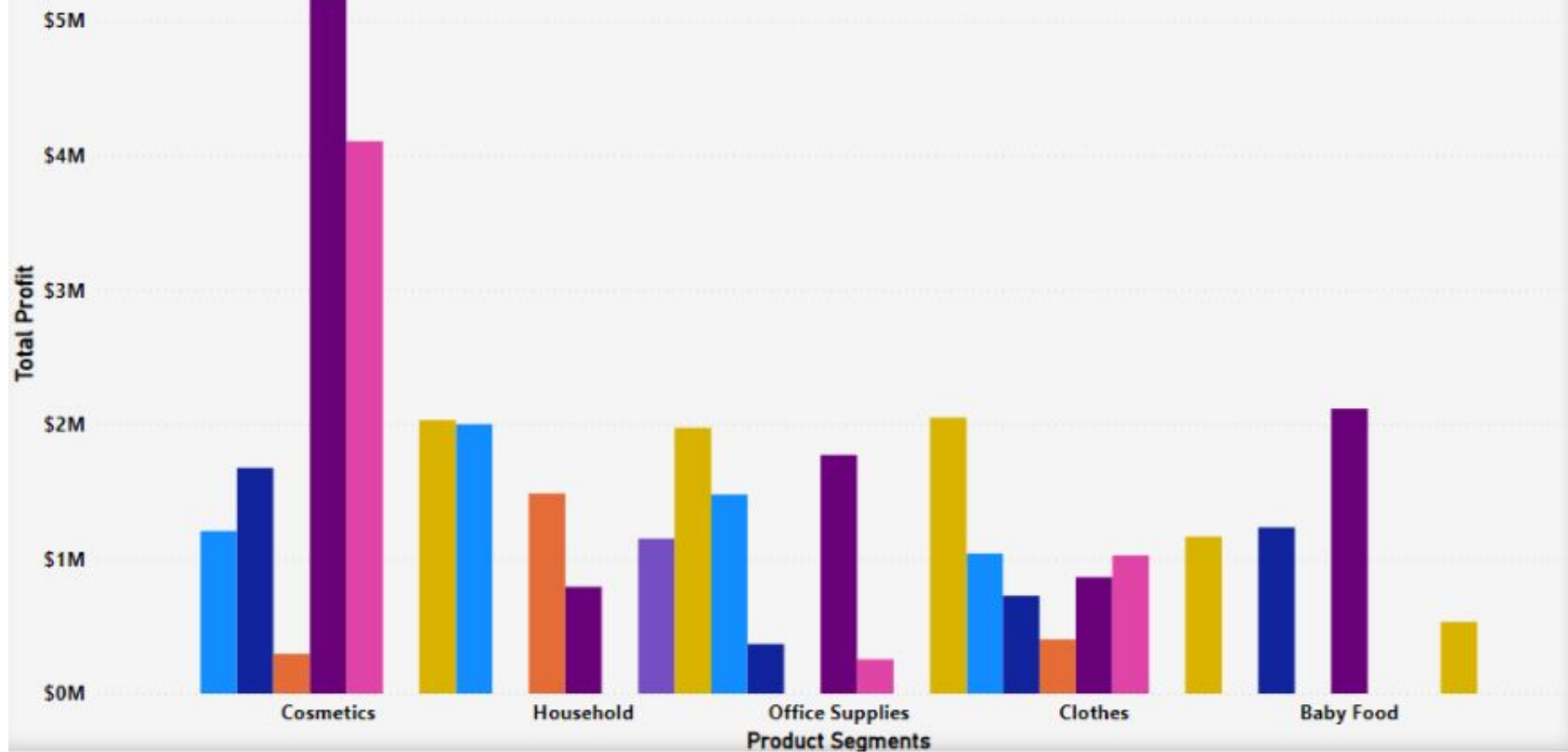
# Insights

- **February** and **November** were the most profitable and revenue generated months.
- Although most of our profit, sales, and revenue come from offline channels, there are some months when users tend to purchase more online than offline. These months include **June**, **December**, and **November**.



# Top 5 Most Profitable Product Segments by Region

Region ● Asia ● Australia and Oceania ● Central America and the Caribbean ● Europe ● Middle East and North Africa ● North America ● Sub-Saharan Africa



# Insights

- Our top 5 most profitable product segments were Cosmetic, Household, Office Supplies, Clothes, and Baby Food.
- **Cosmetics** was the most profitable product segment, with its highest Profit generated in **Europe**, followed by the **Middle East and North Africa**
- **Europe** was the most profitable region for us because it purchased our highest profit margin products, such as cosmetics, office supplies, and baby food.

# Conclusion

- Our highest revenue and profit year was in 2012, but we experienced a decline from 2014-2017.
- Most of our profit, revenue, and sales come from offline channels.
- The Sub-Saharan Africa region was the most profitable and revenue generated region, followed by Europe.
- Cosmetics, Household, Office Supplies, Clothes, and Baby Food were our top 5 most profitable product segments.
- Europe was the most profitable region for us, due to high sales of cosmetics, office supplies, and baby food.
- February and November were the most profitable and revenue generated months.
- Online channels performed well in June, December, and November.

# Recommendations

- We should find the reasons behind this decline after 2014 and take necessary steps in order to improve our Revenue, Sales and Profit.
- We should focus on optimizing our offline channel as it contributes the most to our profit, revenue, and sales.
- We should invest more in Sub-Saharan and European Region as it was our most revenue and profit generated regions.
- We should promote and expand in cosmetics, office supplies and baby food especially in Europe in order to gain more profit.
- We should give more discount offers, free home delivery and other offers to capture online market in the month of June, December and November.