

AMAZON SALES

BY

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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.

Do ETL: Extract-Transform-Load some Amazon dataset and find for me Sales-trend -> month-wise, year-wise, yearly_month-wise

Objective



Goal of the project is to find Sales-trend -> month-wise, year-wise, yearly_month-wise.

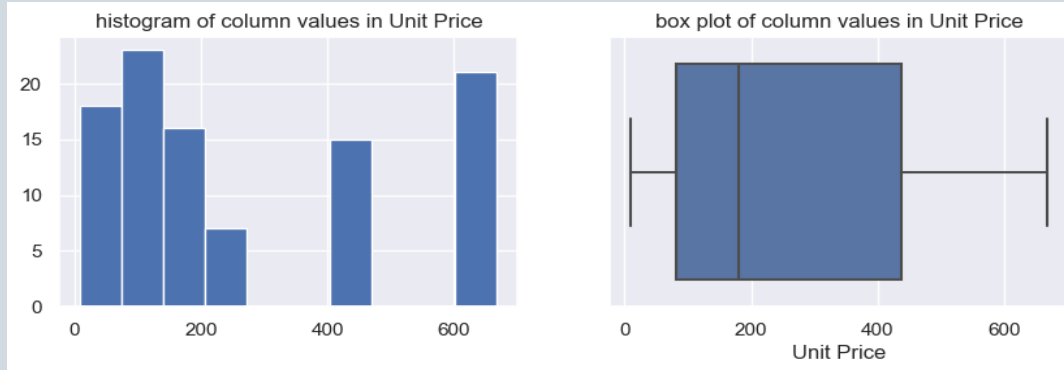


Find key metrics and factors and show the meaningful relationships between attributes. Do your own research and come up with your findings.

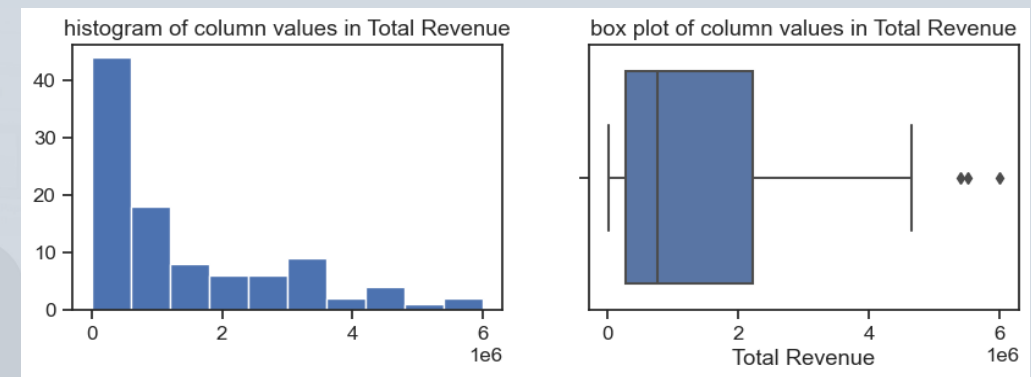
Data Cleaning and Manipulating

- Importing different libraries like numpy, matplotlib, Pandas, etc
- Loading Amazon Data Set of 100 rows and 14 columns
- Treating the missing values imputations if necessary but in the dataset there are no missing values
- Handling the outliers with the help of boxplots for clear idea
- Data cleaning so that unwanted columns are removed and renamed for understating purpose
- Performing Exploratory Data Analysis (EDA)
- Modelling the data and perform Power BI analysis to create dashboards and deployment models
- Reporting the insights

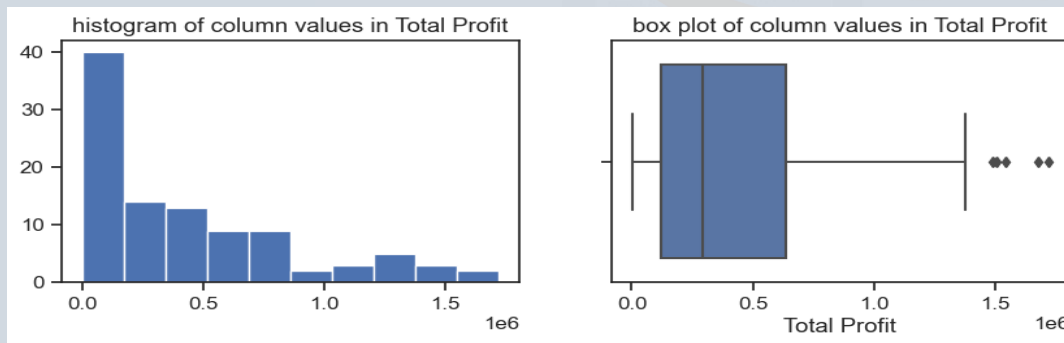
Univariate Analysis



The max unit price can be seen 668.27 and there are no outliers as can be seen from the box plot.

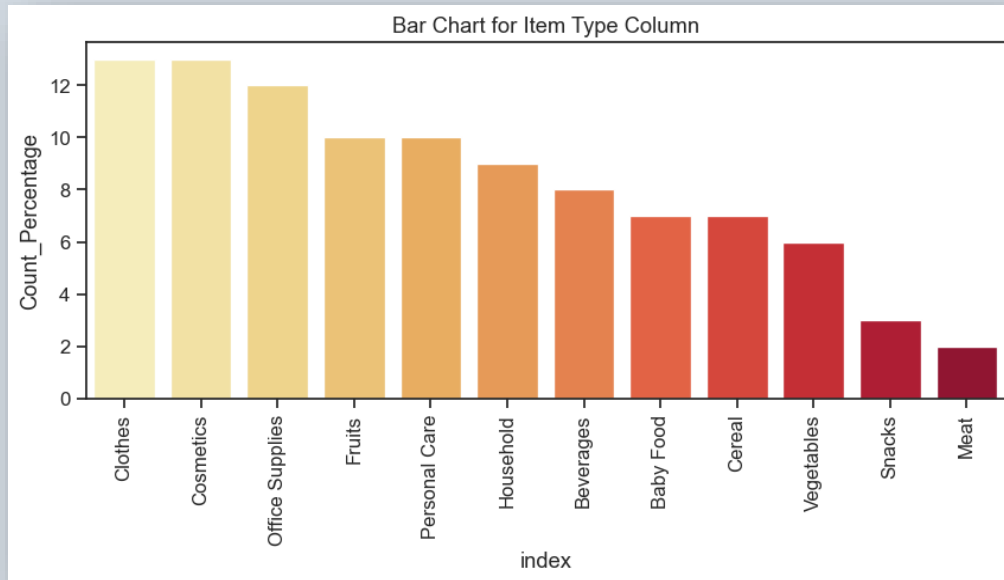


The box plot we can see three outliers on the higher side with maximum of around 6e+06 dollars.

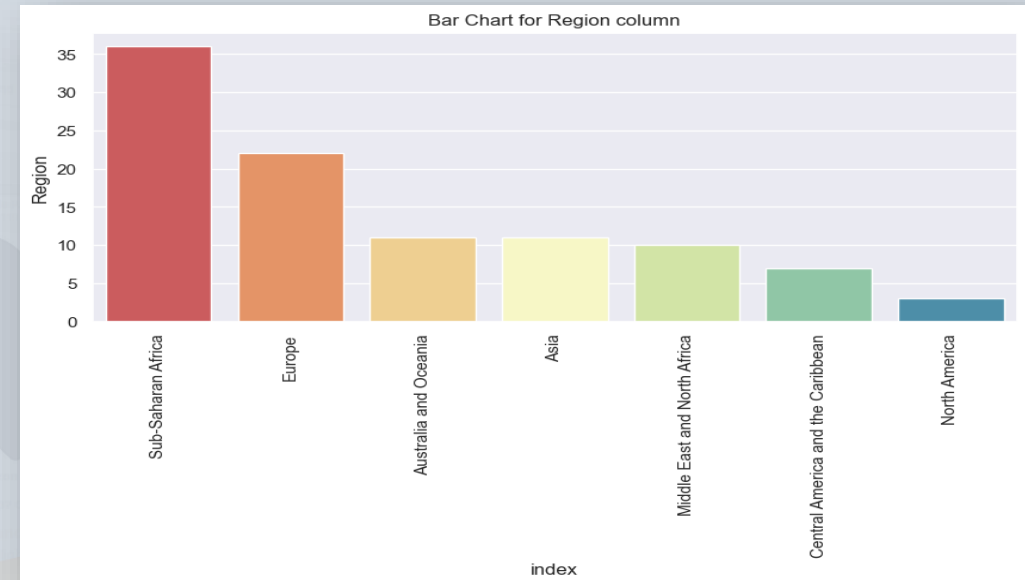


The Total Profit values is within 2.907680e+05 dollars as is shown by the median value. From the box plot we can see we have more than 3 outliers with maximum value of 1.7e+06 which is more than the average total revenue

Visualization in Python

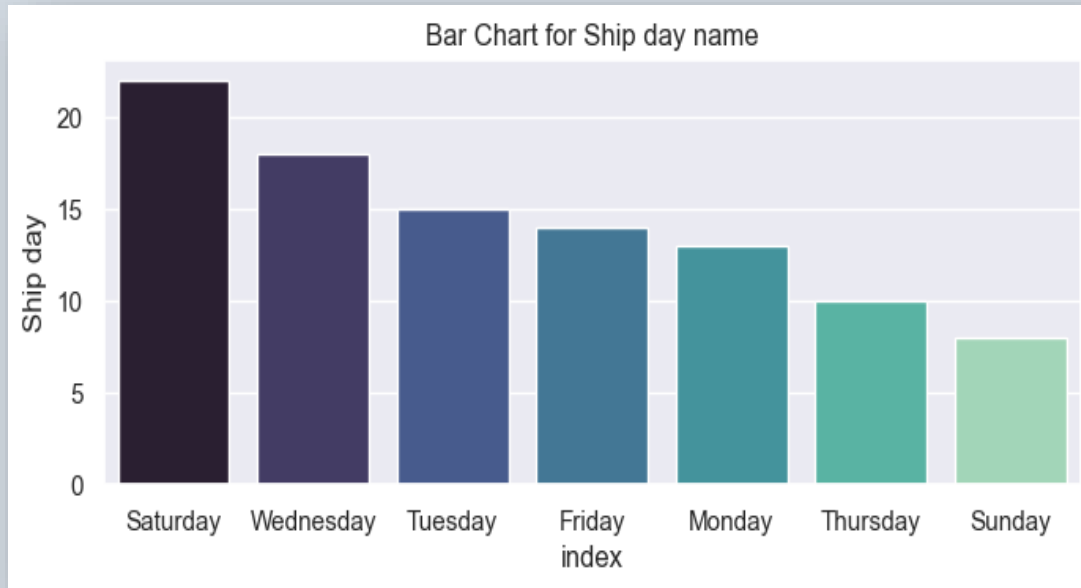


Above graph is plotted by Item type which are sold mostly. Here Clothes and Cosmetics followed by Office supplies are sold higher in number

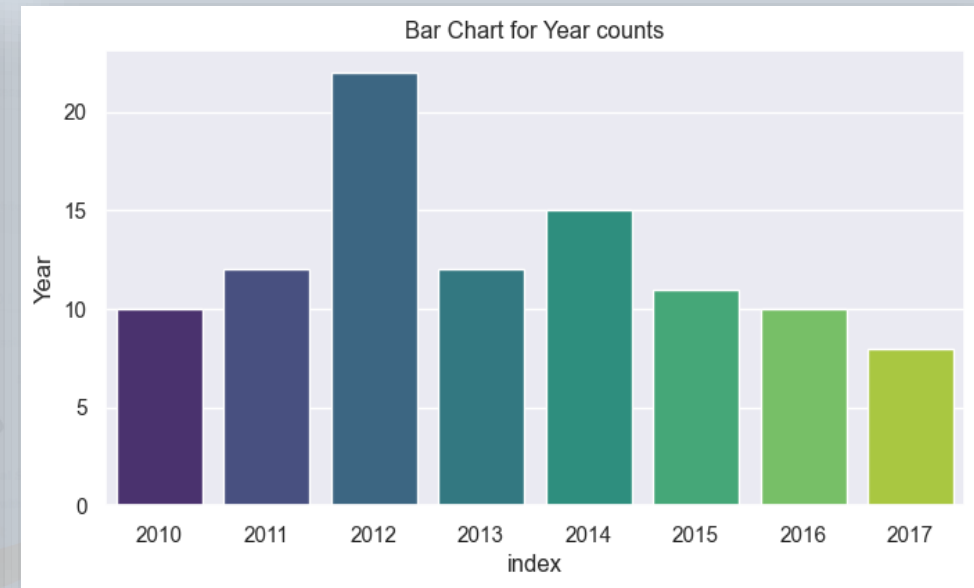


The most items are sold in the region Sub-Saharan Africa followed by Europe

Visualization in Python



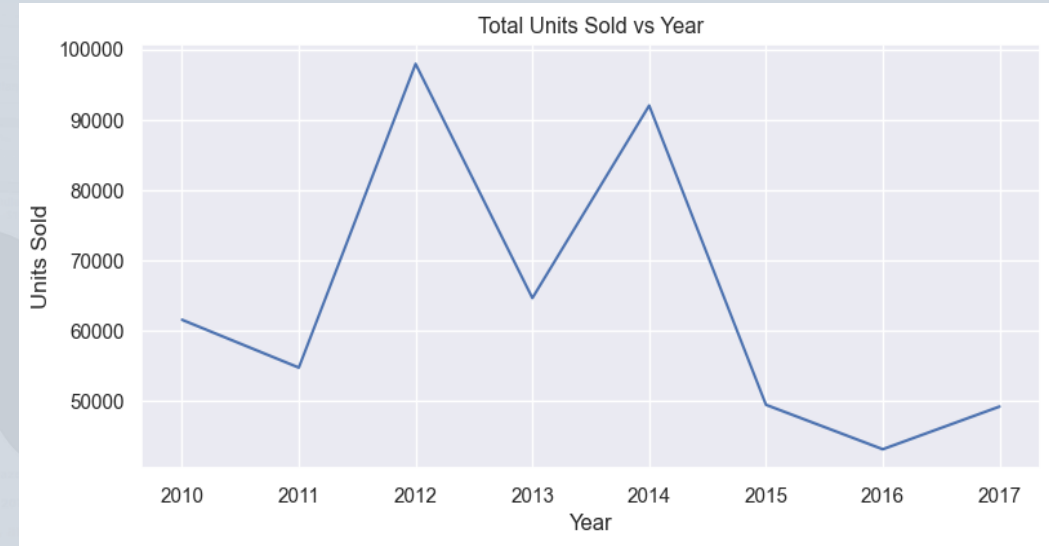
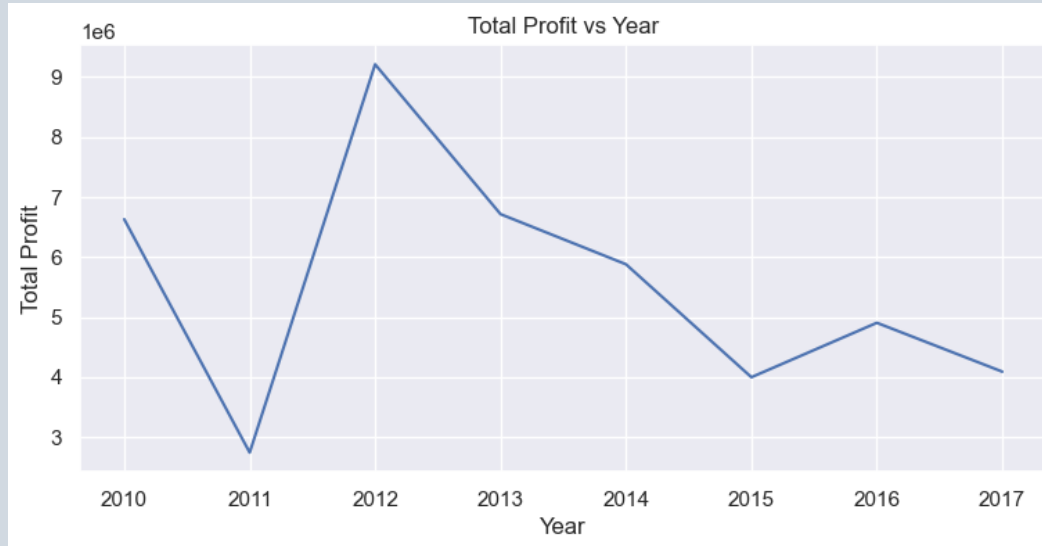
Above graph shows that most of the shipped items are shipped in Saturday followed by Wednesday. The average shipping time takes between 0-50 days from ship day



From the year period 2010-2017. Here we can observe that most of the orders were in year 2012 which are 22 and in 2014 i.e, 15.

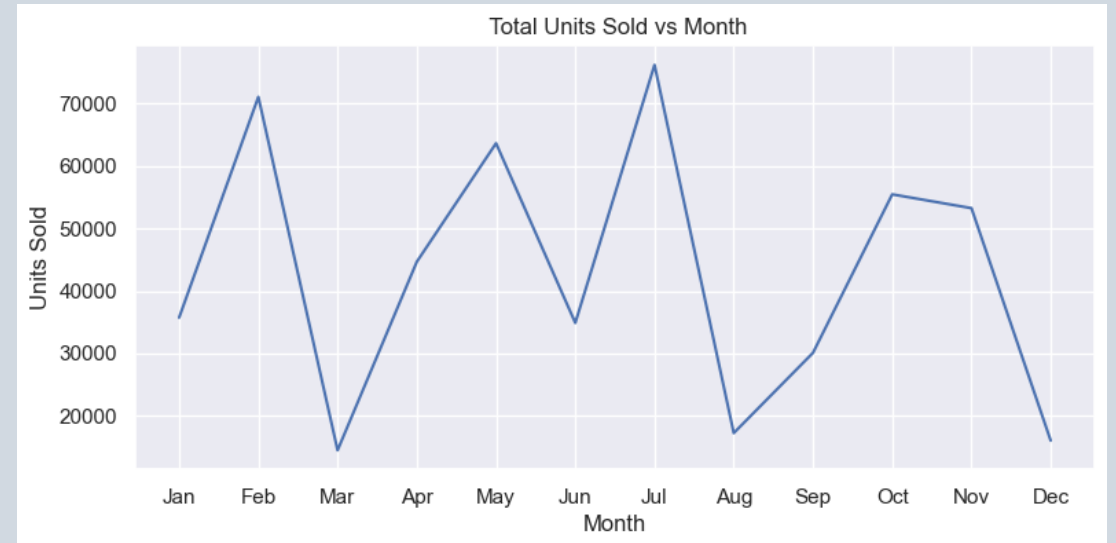
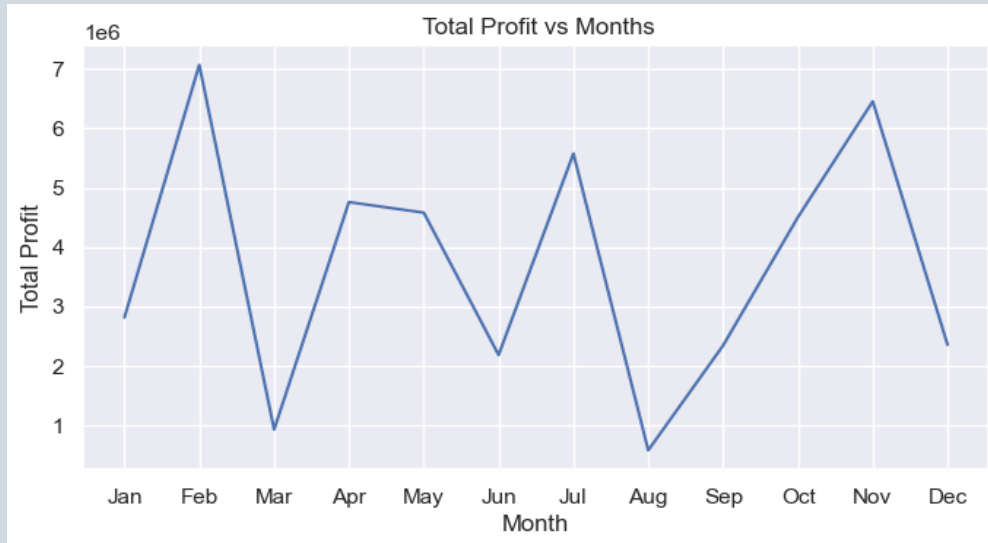
Bivariate Analysis

Total Profit & Units Sold in Years



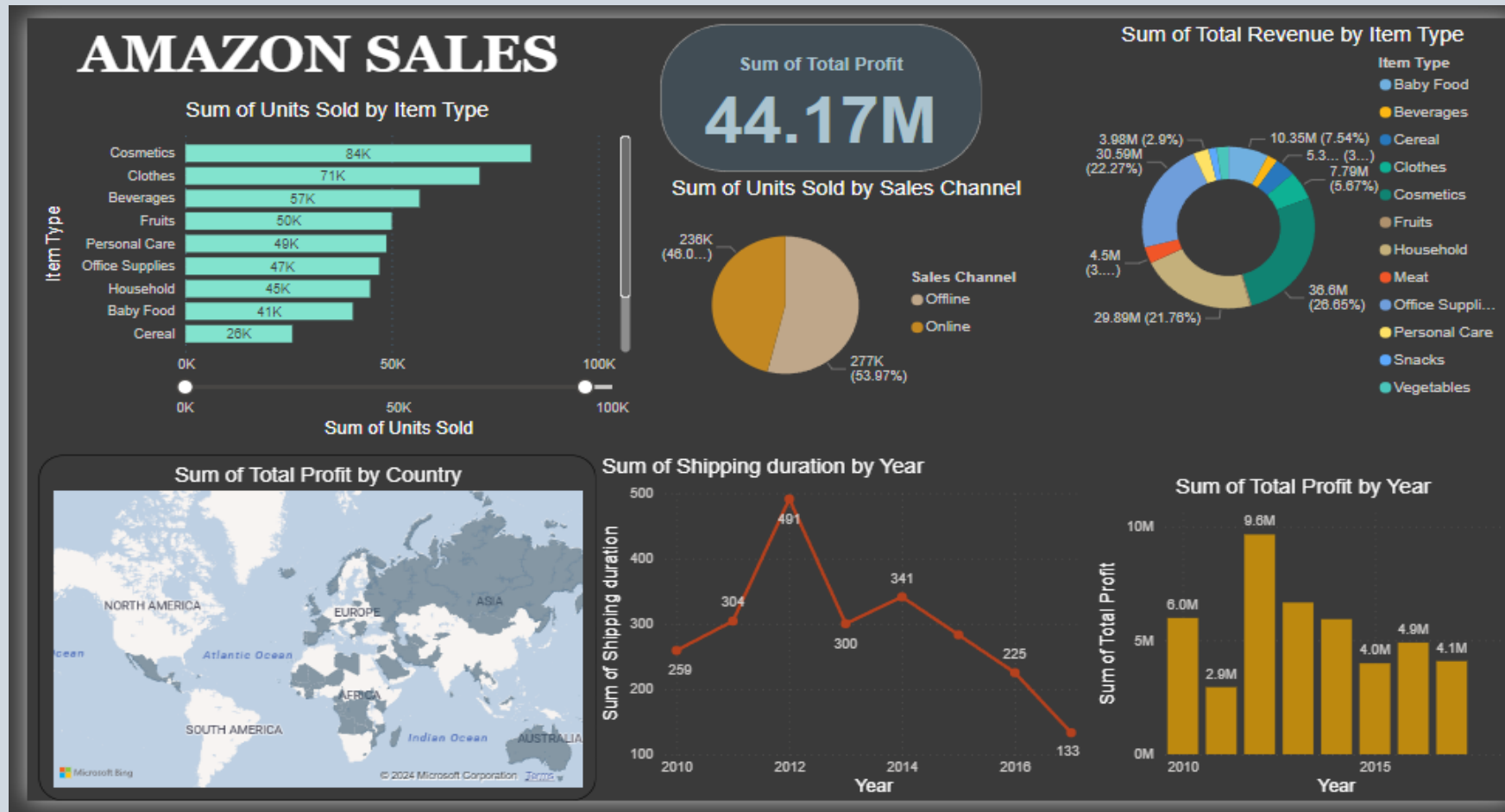
- In Total profit against year it is shown 2012 at it peaks profit and gradually decreasing years after that and least as 2011
- Total units sold has 2012 as well as most products sold and least is seen to be in the year 2016

Total Profit & Units Sold in Months



- From the graph we can say that maximum total profit appears in months Feb and Nov , and least in Mar and Aug.
- We can see highest units sold are in Jul month followed by Feb, and least in Aug, March and Dec

Power BI Report(Click on Dashboard)



Key Insights

- Maximum total profit appears in months Feb and Nov , and least in Mar and Aug
- The total profit is maximum for year 2012 and least in 2011
- Most profitable item is cosmetics and least profitable are food items such as Fruits, beverages and meat.
- Most of the item types are Clothes, Cosmetics and Office Supplies
- The most units are sold in regions Sub-Saharan Africa (37) and Europe (24).
- Most of the shipping is happening on Saturdays and Wednesdays and least on Sundays