"The Sparks Foundation GRIP Internship - To explore Business Analytics - Task 5"

ANALYSIS REPORT

Problem Statement:

Perform 'Exploratory Data Analysis' on the provided dataset 'SampleSuperstore' You are the business owner of the retail firm and want to see how your company is performing. You are interested in finding out the weak areas where you can work to make more profit. What all business problems you can derive by looking into the data? You can choose any of the tool of your choice (Python/R/Tableau/PowerBI/Excel).

Methodology:

To complete this task I used Tableau as a tool for Analysis. The Sparks Foundation has provided us a Dataset named as SampleSuperstore in csv format for analysis task. In order to complete the task First I upload the Dataset in the Tableau Desktop tool then plot the various graphs for Analysis and the following outcomes are:
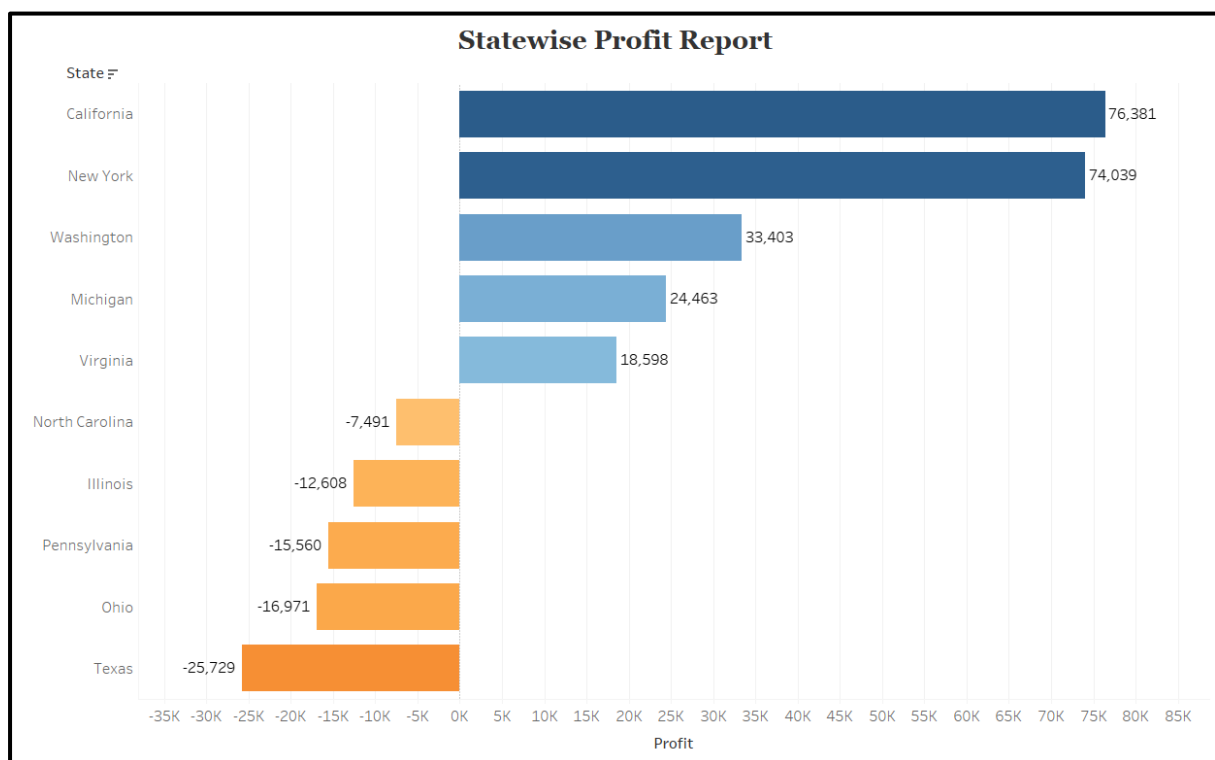
Analysis Insights:

Figure 1 Top & Bottom 5 States by Profit

The top 5 performing states: *California, New York, Washington, Michigan, Virginia.*

The worst 5 performing states: Ohio, Texas, Illinois, North Carolina and Pennsylvania.

Where the California is on the top of performance with a profit of $ 76,381, where Texas is on the bottom with a loss of $ 25,729.
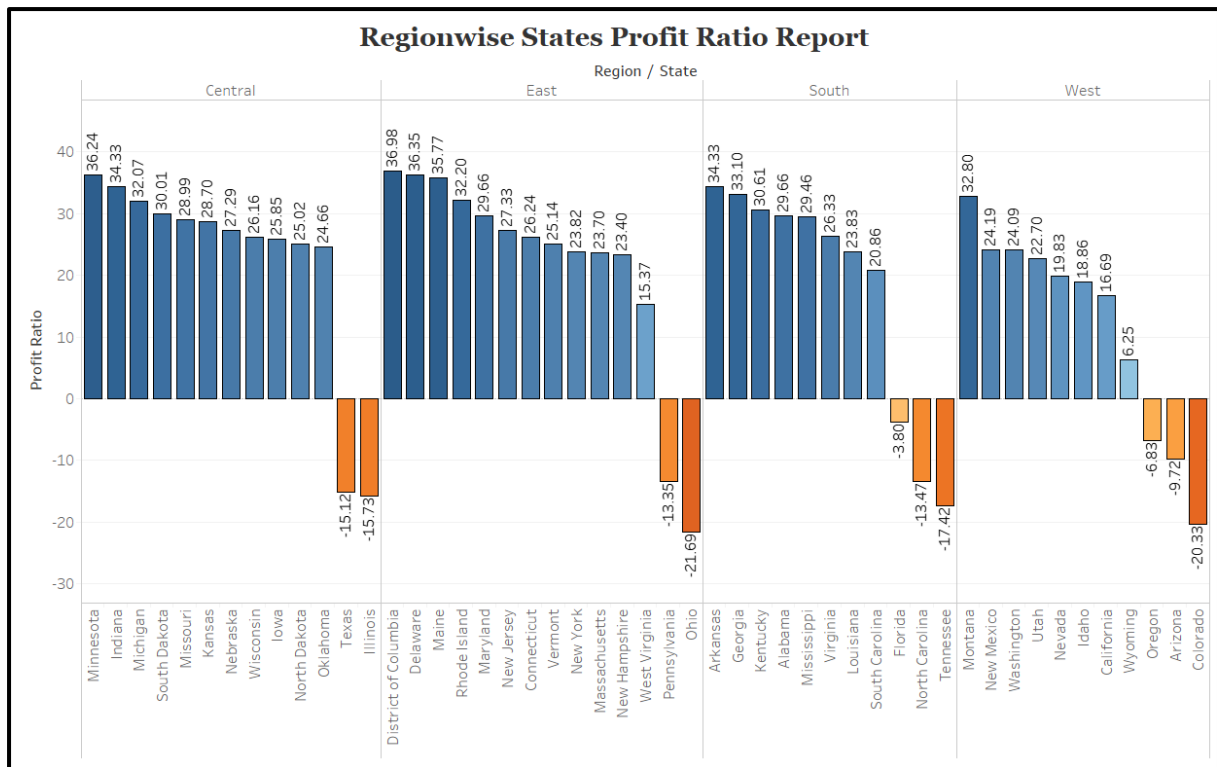
Figure 2 States Performance by their Sales and Profit

In terms of Sales-Profit Ratio **Ohio** is the worst performing states with a loss of **21.69%** followed by *Colorado and Tennessee with loss of 20.33% and 17.42% respectively.* Whereas the **District of Columbia** shows the best performance in terms on sales-profit ratio with **36.98%.**
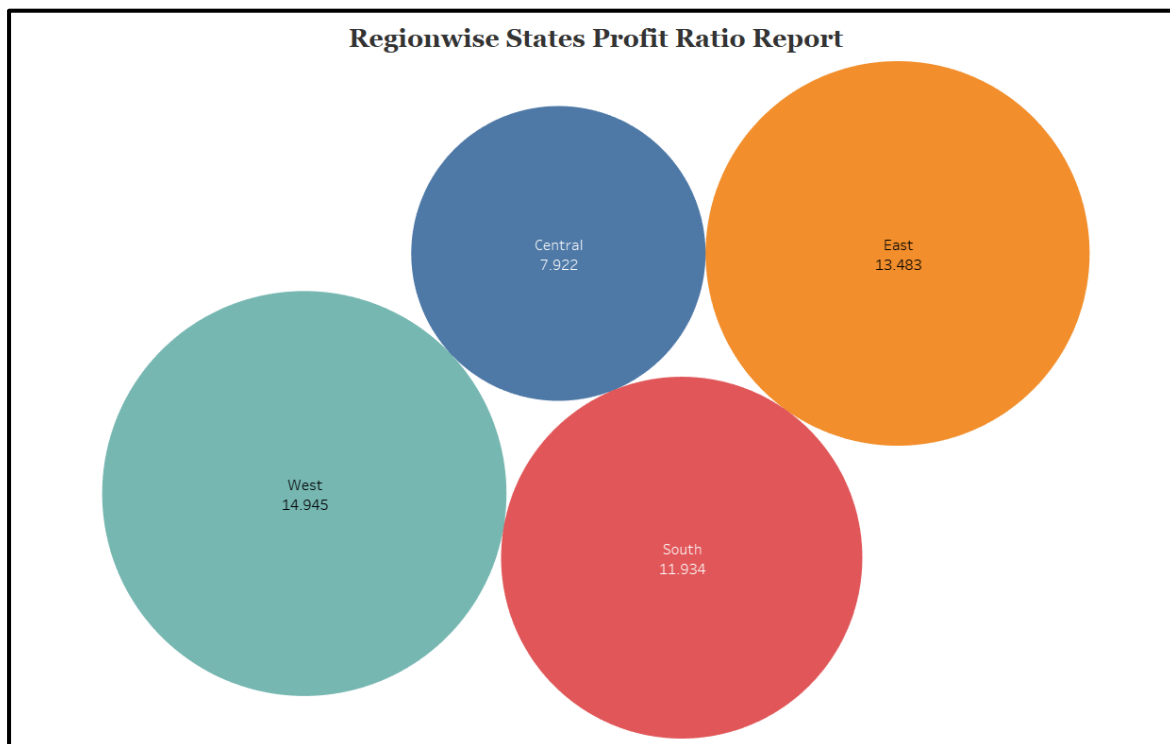

Figure 3 Region wise Sales-profit ratio

Referring to the above we can clearly say that **Western and Eastern** reason are performing far better than central and South region.
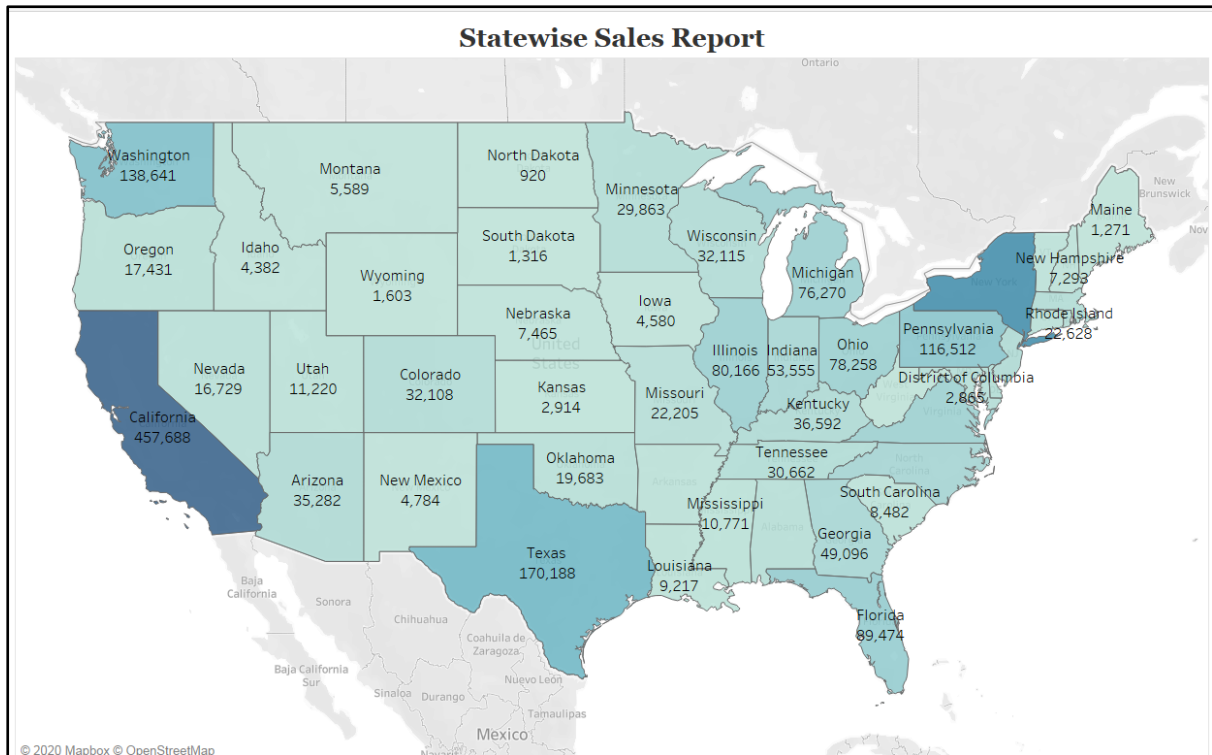
Figure 4 State wise Sales Report

The above Map of United States represents the sales of the superstores in different states of the country. ***Darker the area, higher the sale,*** observation based on this concept represents that the **California** followed by **New York** are the best performers in terms of Sales.
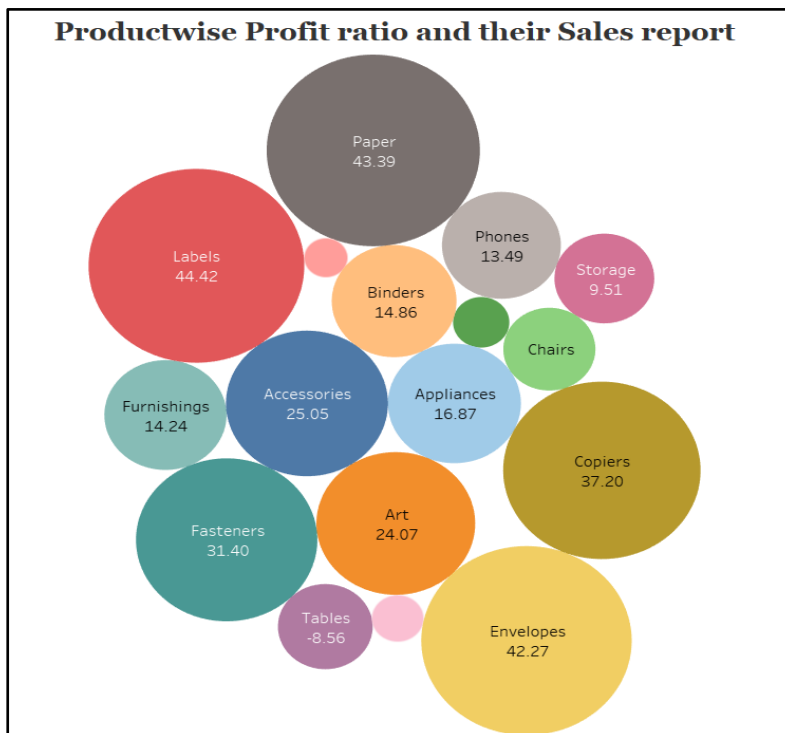

Figure 5 Product wise profit ratio

Larger the bubble, higher the profit, this is the main concept of this word bubble, which represent that Labels, Paper, Copiers, Envelopes and Fasteners are the best performer among the other products.

1. **Accessories, Arts , Appliances and Binders** are performing good in terms of sales and profit ratio, so by putting some extra focus on these subcategories, we can improve their sales and thus this will ultimately help us to increase our profit.
2. **Supplies, Bookcases and Tables** showing a negative sales profit ratio, which means it's a loss making subcategories, So we have to focus more on these subcategories.
3. **Central Region** shows the lowest profit ratio among other regions and the two states i.e. Texas and Illinois are showing the big loss, which may be a reason of central region for being the last among all. Focus on these states can improve the overall profit of the region.