

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 business problems can you derive by looking into the data? You can choose any of the tools of your choice (Python/R/Tableau/PowerBI/Excel).

Observation

For the visualization of the dataset refer-

<https://public.tableau.com/profile/shifali.suvarna#!/vizhome/TSFInternshipTask4/Dashboard1>

From all the regions of U.S we observe that :

- Bookstores, fasteners and supplies have the least amount of profits whereas copies, phones and accessories have given more profit to the company.
- High sales can be observed in phones and chairs while fasteners show least sales.
- Among all the categories, binders have more discount.
- Among all the records, consumer industry contributes the highest followed by corporate and home office.

From all the central region of U.S we observe that:

- Chairs, phones and storage have more sales compared to others, but the profits earned are less than half of the sales.
- But in case of copiers, they have given more profit even though their sales were less.
- Sales and discounts offered in binders were high, but profits earned are very less.
- Machines have faced more loss in spite of having better sales.
- In Michigan, we have better sales and profits but in Chicago and Houston we face the highest loss in spite of having good sales.

From all the east region of U.S we observe that:

- Here chairs are sold more but better profit is earned by copiers.
- More than 30k tables have been sold here but face more loss.
- Sales in bookcases and supplies have increased but profits have gone down for these too.
- In New York City, we have better sales and profits but in Philadelphia and Columbus we face the highest loss in spite of having good sales.

From all the south region of U.S we observe that:

- There has been high sales in tables, chairs, phones and machines. But profits are very low in the case of tables and machines.
- We can observe good sales and profits in Columbus, Atlanta, Henderson and Springfield.
- Profits are low in most of the cities in Florida.

From all the west region of U.S we observe that:

- Binders have shown better sales, discounts and profits.
- Surprisingly here phones have been sold more, but not much profit has been earned from it.
- Good profit is earned from copiers and accessories .
- In cities like Seattle, Los Angeles, San Francisco and San Diego there have been good profits.

Conclusion:

- We can reduce discounts in products that show decrease in profits in spite of having good sales.
- We can give more discounts in products whose sales are low.
- We can sell more of those products that have shown improvement in profits.
- The products whose profits/ sales have gone down need to be advertised more.