

EXPLORATORY DATA ANALYSIS – RETAIL

GRIP – THE SPARKS FOUNDATION

PRESENTED BY:

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TASK 3:



The decorative graphic on the left consists of several hexagons of different shades of blue and teal. Some hexagons contain icons: a lightbulb, a thumbs-up, a network of nodes, a smartphone, a magnifying glass, a gear, and a speech bubble. A large teal hexagon in the center of the graphic contains the white text "#3".

Exploratory Data Analysis – Retail (Level – Beginner)

- Perform 'Exploratory Data Analysis' on dataset 'SampleSuperstore'
- As a business manager, try to find out the weak areas where you can work to make more profit.
- What all business problems you can derive by exploring the data?
- You can choose any of the tool of your choice (Python/R/Tableau/PowerBI/Excel/SAP/SAS)
- **Dataset:** <https://bit.ly/3i4rbWl>
- **Beginner Level** - Create dashboards. Screen-record along with your audio explaining the charts and interpretations.
- Task submission:
 1. Create the dashboards and/or storyboard and record it
 2. Upload the recording either on YouTube or LinkedIn
 3. Create a LinkedIn post as suggested in FAQs

INSIGHTS ON SALES ANALYSIS:

- West region has the highest sum of sales; South has the least.
- Category 'Technology' has the highest sum of sales, whereas 'Office Supplies' has the lowest sum of sales.
- California (belonging to the west region) holds the highest sum of sales, whereas North Dakota (belonging to the central region) holds the least.
- Shipment through standard class holds highest sum of sales; least with same day shipment.
- 'Consumer' segment experiences the highest sum of sales, with 'Home Office' experiencing the least.

INSIGHTS ON PROFIT ANALYSIS:

- West region has highest sum of profit, while South has least. This shows a similar pattern to sum of sales, indicating positive correlation between sales and profit for a region.
- California has the highest sum of profit. However, negative profits exist for states Oregon, Florida, Arizona, Tennessee, Colorado, North Carolina, Illinois, Pennsylvania, Ohio & Texas.
- 'Furniture' category makes the lowest profit.
- Sub-categories 'Supplies', 'Bookcases' & 'Tables' make negative profits with 'Tables' making the greatest negative profit (or least profit).
- Highest profit is made by shipment through standard class.
- Segment 'Consumer' also makes greatest profit.

BUSINESS PROBLEMS:

- Negative profits
- Sales do not follow a common pattern.
- Pricing
- Intense competition

SUGGESTIONS:

- To increase number of sales, following measures can be undertaken:
 1. Targeted marketing strategies like local advertising, promotions, or campaigns
 2. Product Optimization
 3. Additional training, supervision and resources to the sales team
- To increase profit and thereby curb negative profits, following measures can be suggested:
 1. Cost Optimization
 2. Strategic pricing without deterring customers.
 3. Marketing focus on regions products perform well.
 4. Mitigating high-risk areas.
 5. Adjusting products based on market demand and customer feedback.

THANK YOU