**Consumer Goods Data Analysis Report**

1. **Introduction**This report analyzes consumer goods sales data, including orders, returns, customers, regions, and shipping costs. The objective is to identify key trends, customer behaviors, and operational insights to support strategic

decision-making.

1. **Data Overview**

* **Orders Sheet**: Contains detailed sales transactions (products, categories, sales, profit, discounts, etc.)
* **Returns Sheet**: Tracks returned orders.
* **People Sheet**: Maps sales representatives to regions.
* **Shipping Cost Sheet**: Provides per-unit shipping cost by state.
* **Pivot Calculations**: Exploratory analysis answering specific business questions.
* **Dashboard**: Interactive summary of sales insights and KPIs.

1. **Pivot Analysis (Exploratory Questions & Answers)**

**-What is the Most Used Ship mode by our customers?**

**standard calass** is the most ship mode used

**Which customers are our top 10 in terms of sales?**

**top 10 customers in order frequency?**

**Which segment of clients generates the most sales by category?**

**Technology** category is the most sales

**Which city has the most sales value ?**

**New york** city is the most city have value

**Which state generates the most sales value percentage by region?**

**West region** generates the highest share of sales value compared to other regions.

1. **Dashboard Analysis**

The dashboard provides an interactive overview of consumer goods sales, covering categories, regions, customers, and time trends. It helps decision-makers quickly answer critical business questions such as:

1. **Overall Performance**

* What is the total sales value, net sales after returns, and total number of orders?
* How many unique customers did we serve?
* What is the total cost and discount applied?

1. **Sales by Category & Sub-Category**

* Which product category generates the highest sales?
* Which sub-categories contribute the most to revenue?

1. **Regional & Representative Analysis**

* How are sales distributed across regions (West, East, South, Central)?
* Which sales representative drives the highest performance?

1. **Geographical Insights**

* Which cities generate the highest sales?
* Which states contribute most to sales value?
* What are the top 10 states by sales within each product category?

1. **Customer & Order Trends**

* Who are the top customers in terms of sales and order frequency?
* How do sales and order quantities trend over time (by year)?

1. **Returns & Shipping Costs**

* What is the total value of returned orders?

1. **Insights & Recommendations**

**Shipping & Delivery Optimization**

* Since Standard Class is the most commonly used shipping mode, it reflects customer preference for cost-effective options.
* Recommendation: Optimize logistics for Standard Class shipments (bulk contracts with carriers, route efficiency) to reduce delivery times and costs. Additionally, consider promoting Premium/Express shipping with targeted offers to diversify revenue from shipping services.

**Customer Segmentation & Retention**

* The Top 10 customers contribute a large share of sales and order frequency.
* Recommendation: Launch a loyalty program or exclusive offers targeting these high-value customers to maintain their engagement. At the same time, analyze mid-tier customers with growth potential and design personalized marketing campaigns to increase their order frequency.

**Category & Product Strategy**

* Technology category dominates sales compared to Furniture and Office Supplies.
* Recommendation: Increase inventory and marketing efforts in the Technology segment to sustain growth. For Furniture and Office Supplies, consider bundling strategies or promotions to improve their contribution.

**Geographical Focus**

* New York City and California are the highest revenue generators, followed by other large metropolitan areas.
* Recommendation: Focus expansion efforts (regional campaigns, targeted ads, local partnerships) on these high-performing states and cities. Also, investigate why certain states (e.g., Ohio, Michigan) underperform and whether pricing, shipping costs, or competition are barriers.

**Returns Management**

* Returns represent a significant loss in net sales (over 180k).
* Recommendation: Investigate the main drivers of returns (product defects, shipping damages, customer dissatisfaction). Based on findings, enhance quality control, improve packaging, or update return policies to minimize future losses.

**Sales Rep Performance**

* Regional reps show varying performance (e.g., West region outperforming others).
* Recommendation: Analyze the strategies used by top-performing reps and replicate best practices in weaker regions. Provide training or adjust incentive structures to motivate balanced performance across all territories.

**Time Trends**

* The sales trend shows seasonal spikes (e.g., holiday seasons).
* Recommendation: Align inventory planning and marketing campaigns with seasonal demand peaks to maximize revenue during high-traffic months.

**Profitability & Cost Efficiency**

* With high shipping costs and discounts impacting margins, profitability is under pressure.
* Recommendation: Review discount strategies to ensure they attract the right customer segments without eroding profit margins. Optimize supplier contracts and shipping logistics to reduce costs.