WiseAnalytics

Assignment: Power BI Visualization & Dashboard Development

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POWER BI SUMMARY REPORT:

This Power BI report provides key insights into superstore sales performance, customer segmentation, profit and discount trends, and shipping efficiency. The analysis is based on the Superstore Sales dataset, highlighting regional trends, top-performing products, and the impact of discounts on sales.

I. Sales Overview Dashboard

- Total Profit: 92.31K

- Total Sales: 514.29K

- Region-wise Sales Trends:

    o Central: Highest sales in April

    o East: Highest sales in October

    o South: Peak sales in April & October

    o West: Peak sales in March

- Customer Segment Performance:

    o Home Office segment had the most total orders: 261

    o In 2024, only January data is available, indicating active business in Corporate and Small Business segments

    o Sales Trends by Segment:

        ▪ Consumer: Highest sales in March

        ▪ Home Office: Highest sales in April

        ▪ Small Business: Highest sales in October

- Product Sales Trends:

    o Most Sold: Sofas 64 & Binders 42

    o Least Sold: Staplers 49 & Pens 92

II. Customer Segmentation Analysis

- Top 5 High-Value Customers: Identified as customer 218, customer 267, customer 328, customer 350, customer 378

- Customer Lifetime Value (CLV) = 13.99K, it means Each customer, on average, generates $13,990 in revenue over their entire relationship with the business.

- New Customers:

  - Highest influx from Small Business segment, indicating lower purchase frequency

- Regions with the Least Purchase Frequency (<1):

  - West: Office Supplies

  - South: Furniture

  - East: Technology

  - Central: Technology

- Loyalty Insights:

  - Loyal Customers: 314K

  - New Customers: 73K (3x less than loyal customers)

III. Profit and Discount Analysis

- Category-wise Maximum Sales & Profit:

  - Technology: Highest sales and profit

  - Office Supplies: Binders perform best

  - Furniture: Sofas generate maximum revenue

- Discount Impact on Sales:

  - South Region: Sales increase when discounts exceed 10%, followed by Central Region

  - Higher discounts = Higher sales in South Region

- State-wise Performance:

  - Texas: Highest profit contribution

  - California (East Region) & New York (West Region): Lowest sales

IV. Shipping, Delivery & Performance Analysis

- Delayed Orders: 284 total

- Shipping Trends:

  - High-value products take longer to ship

- - Low-value products have shorter shipping times
  - Max shipping days: 7, Min shipping days: 1
- Regional Shipping Performance:
  - West Region: Fastest shipping times
  - New York: Shortest shipping time among all states
  - Texas: Highest average shipping time (4.3 days)
- Monthly Shipping Delays:
  - March: Lowest delays (15 orders delayed)
  - April: Highest delays (33 orders delayed)

Final Business Recommendations:

1. Increase promotional efforts in April (Central Region) and October (East & South Regions) to maximize sales.

2. Enhance customer retention by introducing loyalty programs for Small Business customers to increase repeat purchases.

3. Optimize discount strategies in the South & Central Regions where higher discounts lead to increased sales.

4. Improve supply chain efficiency in Texas to reduce shipping delays and optimize logistics for high-value products.

5. Monitor and address low-performing products (Staplers 49 & Pens 92) by bundling or offering limited-time discounts.

6. Boost marketing in underperforming states such as California (East Region) and New York (West Region) to drive sales.

7. Ensure faster delivery services in April, when delays peak, by streamlining supply chain operations.

By implementing these recommendations, the superstore can enhance customer satisfaction, increase profitability, and optimize logistics for better efficiency.