

Problem Definition and Research Questions

- **Project Title :** Sales Decline in Underperforming Regions at Superstore by data analysis.
- **Team Members :**
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1. Introduction : In today's competitive retail industry, data-driven insights are essential for optimizing sales and driving business growth. This project focuses on analyzing Superstore's sales data to identify key trends, customer behavior patterns, and regional performance variations. Leveraging historical data, this analysis will provide actionable recommendations to enhance sales strategies and overall business performance.

2. Business Problem Statement : The Superstore has noticed a significant drop in sales in certain regions (e.g., the South or West). The client wants to understand the root cause and identify strategies to boost sales in these underperforming areas.

3. Research Questions :

1. What are the sales trends in different regions, particularly in the South and West?
2. Are there specific product categories or sub-categories that contribute to the decline in sales?
3. what are other expected factors that can cause delay if existed ?(example : weather , blocked roads ,etc).
4. Is there a correlation between shipping modes and customer satisfaction in the affected areas?
5. is shipping time normal for the distance or is longer ?does this have an effect on sales ?
6. what is the product with biggest sales ?
7. does the shipping type have an impact on time ?

8. what place has the highest number of sales ?
9. which region is the highest /lowest in sales? why this can occur ?

4. Objectives :

- analyze historical sales data to identify patterns and trends.
- determine the key factors contributing to the decline in sales in the South and West.
- assess customer behavior and purchasing patterns in these regions.
- evaluate the impact of shipping modes, product categories, and customer segments on sales.
- provide data-driven recommendations for increasing sales in underperforming regions.

5. Scope & Limitations :

- The analysis will focus on historical sales data provided by the Superstore.
- It will include regional comparisons to identify disparities in sales trends.
- The study will examine customer segmentation, product performance, and shipping methods.
- Key performance indicators (KPIs) will be used to measure success.
- The study will not include external factors such as competitor strategies, economic conditions, or market saturation, unless relevant data is available.

6. Key Performance Indicators (KPIs) :

- Best Selling Products by Category in Regions.
- Average Product Delivery Time.
- Most Profitable Products by Region.
- Total Sales .
- Sales growth rate over time

7. Expected Outcomes :

- Clear insights into the reasons behind the drop in sales in underperforming regions.
- Data-driven recommendations to boost sales in low-performing regions.
- Identification of best-selling and least-performing products across different categories and regions.
- Analysis of average and actual delivery times to improve customer satisfaction.
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