User Requirements Doc:
Superstore Sales Analysis Dashboard

Objective

To gain insights into the sales and revenue generated by the stores and identify the bestselling products and recent trends.

Problems identified

- The regional manager, Mark, is finding it difficult to understand how the stores are performing and to recognise the trend.
- He has tried to monitor the performance, but has struggled with the vast amount of data being generated from the stores.
- He has also held calls with different third-party providers, but they are all expensive options for underwhelming results
- The BI reporting team lack the bandwidth to assist him with this assignment

Target audience

- Primary – Mark (Regional Manager)
- Secondary - Marketing team members (who will be involved in running)

Use cases

1. Identify the bestselling products and the revenue generated by the store

User story

As the Regional Manager, I want to identify the bestselling products and the recent trends, so that I can decide on which products would be best to run marketing campaigns on to generate a good ROI.

Acceptance criteria

The dashboard should

- Generate easily digestible insights on customers, sales and product patterns.
- Display key metrics (Average Order Value, Profit Margin, Total Revenue, Total Sales, Best Selling Products).
- Be user-friendly and easy to understand.
- Use the most recent data possible.

2. Analyze the potential for marketing campaigns

User story

As the Regional Manager, I want to analyze the potential for successful campaigns for the top products and stores so that I can maximize the ROI

Acceptance criteria

The solution should

- Recommend products and stores best suited for different campaign types.
- Consider profit margin, sales trend, and potential revenue based on current performance
- Clearly explain the recommendations with data-driven justifications

Success criteria

Mark can

- Easily identify the top-performing products and stores based on the key metrics mentioned above.
- Assess the potential for successful campaigns for top products based on profit margin, sales trend, and potential revenue.
- Make informed decisions to advance based on recommendations.

This allows Mark to achieve a good ROI and build relationships with key suppliers for future collaborations, which leads to the growth of the company.

Information needed

Mark needs the top-selling products across the stores, and the key metrics needed include:

- Average Order Value
- Profit Margin
- Total Revenue
- Total Sales
- Best Selling Products

Data needed

The dataset to produce the information we need should include the following fields

- Order ID - A unique identifier for each order.
- Customer ID - A unique identifier for each customer.
- Order Date - The date of the order placement.
- Ship Date - The date the order was shipped.
- Ship Mode - The shipping mode for the order (e.g. standard, same-day).
- Segment - The customer segment (e.g. Consumer, Corporate, Home Office).
- Region - The region where the customer is located (e.g. West, Central, East).

- Category - The category of the product purchased (e.g. Furniture, Technology, Office Supplies).
- Sub-Category - The sub-category of the product purchased (e.g. Chairs, Desktops, Paper).
- Product Name - The name of the product purchased.
- Sales - The sales revenue for the product purchased.
- Quantity - The number of units of the product purchased.
- Discount - The discount applied to the product purchased.
- Profit -The profit generated by the product purchased.

Data quality checks

We need to add measures in place to confirm the dataset contains the data required without any issues – here are some of the data quality checks we need to conduct:

- Blanks check
- Irregular data check
- Data type check
- Duplicate check (for Order ID and Customer ID)

Additional requirements

- Document the solution and include the data sources, transformation processes and walk through on analysis conclusions
- Make source code and docs available on GitHub
- Ensure the solution is reproducible and maintainable so that it can support future updates