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