BrightLight Data Analytics

Case Study 1: Sales

1. INTRODUCTION & INSTRUCTIONS

1.1 INTRODUCTION

You have been provided with a generic, simulated dataset **"Sales Case Study.csv"**, which indicates the daily trading information for a large retail store, aggregated for the day. The data is only for one of the products sold at this store.

Each record contains the:

- **Date** = The day on which the sales occurred
- **Sales** = Total Rand value of the sales that occurred
- **Cost of Sales** = Total Rand value of the cost of sales that occurred
- **Quantity Sold** = Total number of units that have been sold

1.2 INSTRUCTIONS AND OBJECTIVE

Using this dataset, your objective is to develop metrics and derive subsequent insights.

The metrics that you need to develop are:

1. **What is the daily sales price per unit?**
2. **What is the average unit sales price of this product?**
3. **What is the daily % gross profit?**
4. **What is the daily % gross profit per unit?**
5. **Pick any 3 periods during which this product was on promotion/special:**
    - What was the **Price Elasticity of Demand** during each of these periods?
    - In your opinion, does this product perform **better or worse** when sold at a promotional price?
6. **Please derive any other interesting insight you can from the dataset provided.** This can include:
    - Interesting **visuals**
    - **Reports**
    - **Dashboards**
    - **KPIs or metrics**

Important to Note:

- You will have **10 working days (2 weeks)** , from the day that you receive this case study, to submit your work.
- **Due Date: 30 March 2025, Midnight.**
- It is important to present/submit your work in a **readable and understandable manner**, as you will be assessed on **both the answers provided and the process followed**.
- You may use any tool at your disposal, and you are also allowed to research any techniques required to develop your submission.

Recommended Tools for Analysis:

Coding Platforms:

- Microsoft SQL Server
- Databricks
- DBeaver
- SQL Developer
- Google BigQuery
- Google Colab

Data Visualization:

- Power BI
- Tableau
- Microsoft Excel
- Google Sheets

Presentation & Reporting:

- Microsoft PowerPoint
- Canva
- Miro