

CASE STUDY FOR DATA VISUALIZATION

This case study is designed to test your understanding and knowledge of data analytics and visualization, including leveraging your skills to generate actionable business insights through analytics to help business leaders make sound business decisions.

The case study is meant to be addressed in two areas of interest.

1. Data Visualization - load data into your visualization tool, to perform analysis then create and interpret visualizations

Datasets

All the datasets required for this case study are to be downloaded from the following link

- [Case Study Datasets](#)

CASE STUDY BACKGROUND

JustDrinks Ltd is a fictitious major retailer of alcoholic drinks in a fictional state of Lincoln. With about 80 retail locations and total sales in excess of \$450 million.

JustDrinks leadership team has asked you, as the Data Analyst, to complete due diligence on their data (Starting and Ending inventory, Purchases and Sales) for the just concluded financial year (12-month period).

Expectations

- Dashboards created to be published and shared
- Dashboard exports can also be shared
- Finally, a PowerPoint presentation is expected to be put together to answer all the questions

TASKS

SECTION 1:

1) Assist the CFO, JustDrinks in creating Worksheets and Dashboards to answer these Questions:

- a) What is the total Sales Dollars and percentage breakdown of wine and spirits?
- b) What is the most popular Size for wine and for spirits based on Sales Dollars and Quantity?
- c) Which Stores have the highest and lowest average sales price for wine and Spirits?

2) The CFO has also asked that, in your opinion, what other data/variables would you want to collect to improve the business and why?

SECTION 2: Vendor Activity & Performance

- 1) Which vendors contribute the most to total purchases (by value and quantity)?
- 2) How do vendor purchase trends change over the 12-month period?
- 3) Which vendors can be classified as critical suppliers based on purchase value and frequency?

SECTION 3: Inventory Dynamics & Shelf-Time Analysis

- 1)How does inventory purchased compare with inventory sold across the year?
- 2)Which products or categories have the longest average shelf time before being sold?
- 3)What seasonal patterns affect inventory turnover and stock efficiency?

SECTION 4: Sales & Store Performance

- 1)What is the total sales value and percentage breakdown between Wine and Spirits?
- 2)Which stores have the highest and lowest average selling prices for each category?
- 3)Which product sizes generate the most sales revenue for Wine and Spirits?

SECTION 5: Strategic & Executive Insights

- 1)Which vendors, stores, or products drive the highest overall profitability?
- 2)How does inventory turnover correlate with sales growth and profit margins?
- 3)What are the top actionable insights that management can use to improve performance?

SECTION 6: Future Data Collection (Expanded Q4)

- 1)What additional customer or vendor data would help improve future analysis?
- 2)How could tracking marketing promotions, discounts, or delivery times enhance insight accuracy?
- 3)Which new metrics (e.g., profit margin, waste, or sustainability data) should be added for better decision-making