

## About Dataset

Dataset: [Beverage Sales Dataset](#)

### Product Information:

Product Item ID	Category	Brand	Product	Date of Product Launch	New Product Tag
65	Cold Beverages	Limca	Limca	17-03-2016	Running
24	Cold Beverages	Coca_Cola	Coca_ColaZero Sugar	25-03-2000	Running
124	Cold Beverages	MinuteMaid	PulpyOrange	21-09-1993	Running
14	Cold Beverages	Coca_Cola	Coca_Cola	04-07-2014	Running

### Packaging Details:

Product Item ID	Packaging Type	Packaging Qty (ml)	Packaging Category	Packaging Qty (n ml)	MRP Unit Price
65	PET	2250	Regular	2250	150
24	PET	750	Regular	750	60
124	PET	250	Regular	250	45
14	PET	1750	Regular	1750	90

**Location Details:**

State	City	Latitude	Longitude	Country
Canterbury	Christchurch	-43.5321	172.6362	New Zealand
Krabi	AoNang	8.0376	98.815	Thailand
Quang Ninh	HaLong	20.9517	107.0894	Vietnam
Belait	KualaBelait	4.5841	114.1994	Brunei

Each row in the dataset corresponds to an order made by a customer. We have the following features:

<b>Column Name</b>	<b>Unique Values</b>	<b>Description</b>	<b>Column Category</b>
SalesChannel	11	The platform or method through which the sale was made.	<b>Sales Information</b>
Channel Type	4	Categorizes the sales channel (e.g., Online, Retail).	<b>Sales Information</b>
OrderQty	250	The quantity of items ordered in the transaction.	<b>Sales Information</b>
SalesValue	2481	The total value of the sales transaction.	<b>Sales Information</b>
Discount	4	The discount amount offered on the MRP for the transaction.	<b>Sales Information</b>
Country	13	The country where the transaction occurred.	<b>Sales Information</b>
ProductItemID	153	Unique identifier for the product.	<b>Product Information</b>
Category	2	The category to which the product belongs.	<b>Product Information</b>
Brand	16	The brand of the product.	<b>Product Information</b>
Specific Product Name	39	The specific name of the product.	<b>Product Information</b>

Packaging Type	5	Details about the product's packaging (Type, Quantity, Category).	<b>Product Information</b>
Packaging Quantity	23	Details about the product's packaging (Type, Quantity, Category).	<b>Product Information</b>
Packaging Category	2	Details about the product's packaging (Type, Quantity, Category).	<b>Product Information</b>
PackagingQty_N_ml	23	The quantity of the product in milliliters for standardized comparison.	<b>Product Information</b>
MRP_UnitPrice	16	Maximum Retail Price per unit of the product.	<b>Product Information</b>
Product_Launch_Date	152	The date when the product was launched in the market.	<b>Product Information</b>
IsNewProduct	2	Indicator whether the product is new (True) or not (False).	<b>Product Information</b>
Cost Per Unit	23	The cost incurred per unit of the product.	<b>Financial Information</b>
Margin Percentage	3	The percentage of margin made from the transaction.	<b>Financial Information</b>
Profit	2272	The profit earned from the transaction.	<b>Financial Information</b>

RetailerId	650	Unique identifier for the retailer.	<b>Retailer Information</b>
Retailer Name	263	The name of the retailer.	<b>Retailer Information</b>
Country	13	The geographical location of the retailer (country, State, City).	<b>Retailer Information</b>
State	53	The geographical location of the retailer (State, City).	<b>Retailer Information</b>
city	57	The geographical location of the retailer (State, City).	<b>Retailer Information</b>
Lat	206	Latitude and longitude coordinates of the retailer's location.	<b>Retailer Information</b>
Long	205	Latitude and longitude coordinates of the retailer's location.	<b>Retailer Information</b>
SrNo	25000	Serial number of the transaction.	<b>Transaction Information</b>
Transaction Date	1492	The date when the transaction occurred.	<b>Transaction Information</b>

## How to Analyze?

1. Identify the users or stakeholders for the dashboard.
2. Design Empathy Map to define Users' Goals and Challenges or pain points.
3. Understand the Objectives and Goals
4. Identify Metrics or KPIs Matter the Most.
5. Ask Business Questions

### Step 1: Identify the users or stakeholders for the analysis.

#### User Persona: Sales Manager

#### Responsibilities:

1. **Develop and implement effective sales strategies:** Create and execute sales strategies tailored to diverse markets and consumer segments to maximize revenue generation.
2. **Lead and motivate the sales team:** Provide leadership, guidance, and motivation to the sales team to achieve and exceed sales targets.
3. **Analyze sales data and performance:** Utilize data analytics to assess sales performance, identify growth opportunities, and refine sales tactics.

#### Needs:

1. **Strong leadership and communication skills:** Ability to lead and communicate effectively with the sales team and stakeholders.
2. **Analytical and strategic thinking abilities:** Proficiency in analyzing data and developing strategic plans to drive sales growth.
3. **Results-driven mindset and adaptability:** Motivated by achieving sales targets and adaptable to changing market conditions.
4. **Customer-focused approach:** Dedication to understanding customer needs and delivering excellent service to build long-term relationships.

**Challenges:**

1. Navigating competitive market conditions and responding to competitor strategies.
2. Adapting sales strategies to changing consumer preferences and market trends.
3. Managing and motivating a diverse sales team to achieve high performance.
4. Ensuring product availability and visibility across a wide range of retail environments.

**Step 2: Design Empathy Map**

Category	Details
<b>Think &amp; feel</b>	<ul style="list-style-type: none"><li>• Motivated by achieving sales targets,</li><li>• Excited about new product launches</li><li>• Anxious about market competition.</li></ul>
<b>Hear</b>	<ul style="list-style-type: none"><li>• Customer feedback and requests</li><li>• Competitive market updates</li><li>• Performance reports from the sales team.</li></ul>
<b>See</b>	<ul style="list-style-type: none"><li>• Sales performance dashboards, market research reports.</li><li>• Promotional materials and displays in retail environments.</li></ul>
<b>Say &amp; do</b>	<ul style="list-style-type: none"><li>• Sets clear sales goals and strategies</li><li>• provides feedback and coaching to the sales team -Negotiates deals with retailers and distributors.</li></ul>

### Step 3: Identify the Key Performance Indicators (KPI's)

KPI Name	Columns Used	Formula	Description
Sales Volume	OrderQty	Sum (OrderQty)	Total units sold, reflecting market demand.
Discount Impact	Discount, Sales Value, Profit	Average (Discount), Correlation (Discount with SalesValue and Profit)	Average discount provided and its effect on sales volume and profitability.
Product Mix Diversity	Product_ItemID, OrderQty	Count (Distinct ProductItemID), Sum (OrderQty) per ProductItemID	Variety of products sold, indicating market reach and consumer preference diversity.
Geographic Market Share	State, City, SalesValue	Sum (SalesValue) per State/City	Sales distribution across different regions, showing market dominance.
Sales Channel Effectiveness	SalesChannel, OrderQty, Profit	Sum (OrderQty) and Sum (Profit) per SalesChannel	Performance of different sales channels in terms of volume and profitability.

### Step 4: Understand the Goals & Objectives of User

#### Objective:

- Develop and implement effective sales strategies to maximize revenue and market share for Coca Cola's beverage products.
- Analyze sales data to identify opportunities for growth and areas for improvement in both product offerings and sales tactics.
- Drive the sales team towards achieving and surpassing sales targets through motivation, training, and performance monitoring.



**Goals:**

- To achieve or exceed sales targets for Coca Cola's range of beverage products.
- To increase brand presence and market share in existing and new markets.
- To effectively launch new products and ensure their success in the market.
- To enhance customer satisfaction and loyalty through excellent service and product availability.

**Business Questions:**

1. What is the total order quantity and sales amount for all time? How have sales changed over the years?
  - Metric: Order Quantity, Total Sales Amount
  - Insights: This analysis will provide the total sales generated in terms of total order quantity and amount i.e. sales of \$366.4 M with 6.3 M orders. As we can see, there have not been many changes in sales over the years.
2. What are the top 10 countries and brands by sales?
  - Metric: Total Sales
  - Insights: India seems to be a major market for the sales of Beverages as it is generating sales of 25% overall sales. In terms of brand, most of the sales are generated from sales of Coca-Cola with 15%, followed by Georgia and Fanta.
3. Is there any correlation between cost per unit and total sales? Does low cost per unit mean more sales?
  - Metrics: Cost per Unit, Sales
  - Insights: Brands such as Coca-Cola, Fanta, Limca, Sprite and Rim Zim are generating high sales with low cost per unit, while brands like Honest Tea, Schweppes are performing badly despite their very low cost per unit.

**Outcomes:**

- With this analysis, we were able to observe the total sales of beverages and sales being constant over the years. We can assess the need for more strategic campaigns as sales have been stagnant in recent years.
- As most of the sales are coming only from India, the focus on the other countries with market potential should be prioritized.
- With some of our beverages performing poorly despite having low cost per unit is a big concern. The strategies should be made for those products as they are not contributing significantly to overall sales.

## Submission:

### Deliverables:

- Cleaned and processed dataset
- Tableau dashboards
- Final report in PDF format summarizing the analysis, insights, and recommendations

### Deadline:

- **26/ 27 July 2024**

## Evaluation Criteria:

- **Data Quality (25%):** Accuracy and completeness of data cleaning and preparation. (Graded A, B, C, D)
- **Analytical Rigour (30%):** Depth and thoroughness of the analysis conducted. (Graded A, B, C, D)
- **Insights and Recommendations (25%):** Relevance and actionability of the insights derived. (Graded A, B, C, D)
- **Visualization and Reporting (20%):** Clarity, interactivity, and professionalism of the dashboards and final report. (Graded A, B, C, D)

## Scoring Mechanism:

- Each criterion will be scored out of 100.
- The final score will be a weighted average based on the criteria weightage.
  - **Data Quality:** (Score out of 100) x 0.25
  - **Analytical Rigour:** (Score out of 100) x 0.30
  - **Insights and Recommendations:** (Score out of 100) x 0.25
  - **Visualization and Reporting:** (Score out of 100) x 0.20
- The total score will be the sum of these weighted scores.