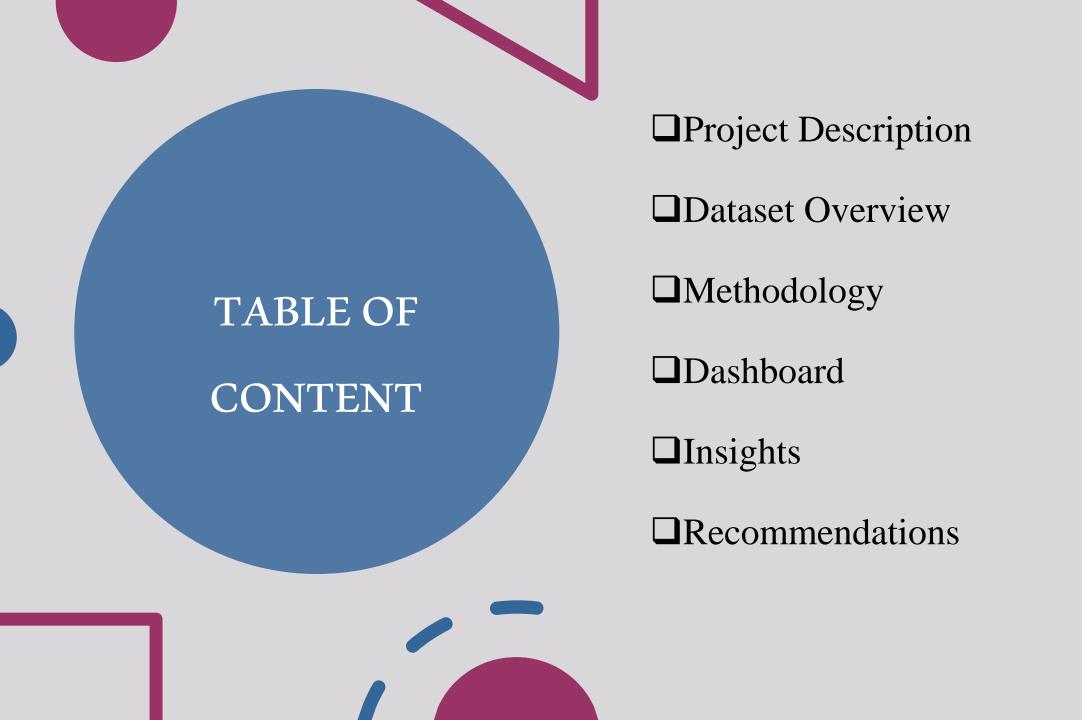


Analysis.git

VICTORIA SMART





# PROJECT DESCRIPTION

The aim of this project is to build a data model using tableau to analyze the performance of a beverage business using the data provided and offer recommendations to drive sales and profit.

The goal is to:

- O Evaluate financial performance against budgeted targets
- O Identify sales and seasonal trends
- O Determine the most and least profitable products
- Assess regional and state-level profitability
- Provide strategic recommendations for improving profit margins

# DATASET OVERVIEW

The analysis utilized three key sheets:

- **1. Location Dim**: Provides insights into the state, market region and market size. This helps analyze profitability based on location.
- 2. Product Dim: Maintains a comprehensive record of products, including product IDs, product types (e.g., coffee, tea, etc.), specific beverages (e.g., decaf), and brew types (e.g., regular, decaf). This sheet plays a crucial role in linking product details to sales performance.
- **3. Sales Fact**: Contains key business performance metrics, serving as the foundation for profitability analysis. It includes revenue, COGS, profit, operating expenses, inventory, date, budgeted targets, area code, product ID).

## **METHODOLOGY**

This project utilized Tableau to create a data model and visualize the results. The main steps of the project are summarized below:

### Data Cleaning

☐ Manipulate datasets, eliminate duplicates, and resolve missing values

### Data Exploration

☐ Understand the datasets to identify relevant columns and relationships essential for the analysis

### Database Analysis

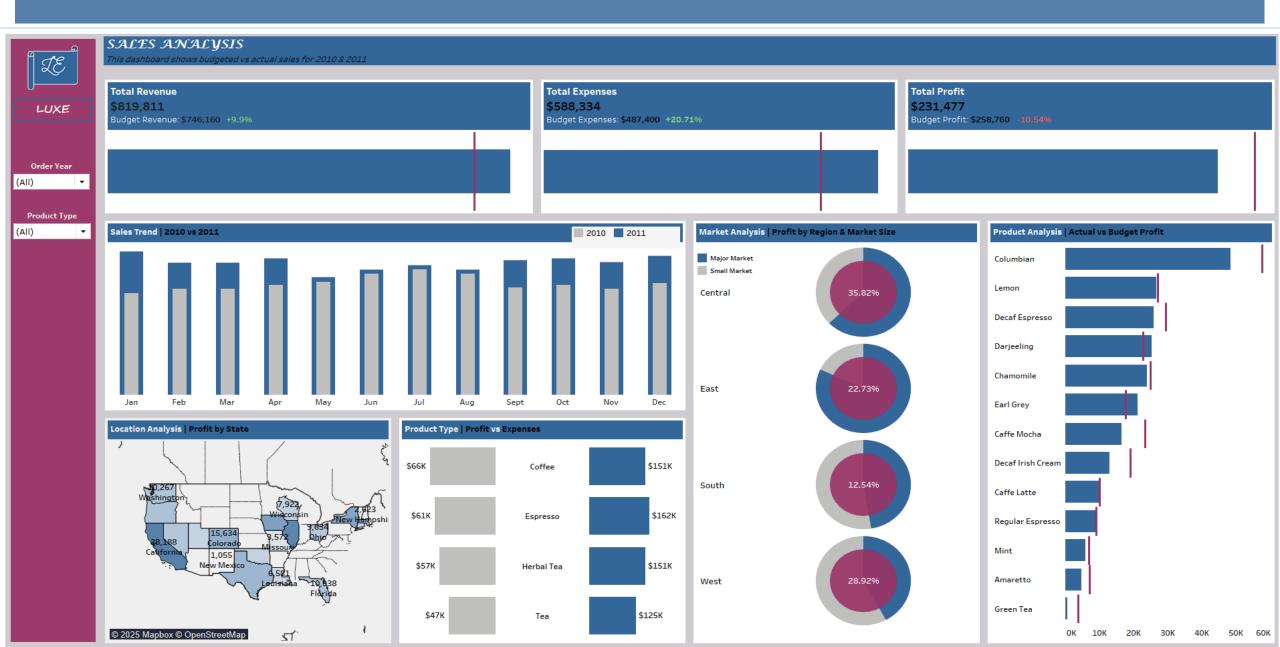
- ☐Build the data model using Tableau
- ☐ Create calculated measures to extract meaningful insights from the data.

#### Result / Visualizations

□ Visualize results using Tableau



## **DASHBOARD**





# **INSIGHTS**



## FINANCIAL PERFORMANCE

- □ Revenue exceeded the budgeted target by 9.9%.
- □ Expenses exceeded the budget by 20.71%, indicating higher operational costs than expected.
- □ Profit fell short of the target by 10.54%
- □Overall, 2011 performed better than 2010, indicating business growth.

# YEARLY SALES TRENDS 2010 VS 2011

Sales followed a uniform
distribution with minor fluctuations
but remained fairly stable
throughout the year. July recorded
the highest sales, but no significant
seasonal spikes were observed.

2010

This year-over-year comparison suggests that seasonality plays a significant role in consumer demand, a factor that should be considered in forecasting and inventory planning.

**Summary** 

### 2011

Higher sales were recorded during the cold months (September–April) compared to the summer months (May–August), suggesting a potential seasonal preference for beverages.

- □ Budget-wise, tea was the best-performing product, exceeding its target profit by 7%.
   However, it had the lowest profit margin, indicating a need for price optimization or cost reduction.
- ☐ All other products failed to meet their target profit.
- ☐ Coffee was the most profitable product despite its high costs, followed closely by espresso, while green tea was the least profitable.



- ☐ Coffee achieved its highest profit in the Eastern Region (40.2%), followed by the Central Region (31.2%).
- □ Espresso was most profitable in the Western Region (34.5%), with the Central Region close behind (33.5%).
- ☐ Herbal tea generated the highest profit in the Western Region (40.9%), followed by the Central Region (38.5%).
- ☐ Tea recorded its highest profit in the Central Region (41.9%).





# REGIONAL ANALYSIS

### Overall Regional Performance

Most Profitable Region: Central Region (35.82% of total profit)

Least Profitable Region: Southern Region (12.54% of total profit)

### Regional Performance by Product Type

Coffee: Most profitable in the Eastern Region.

Espresso: Most profitable in the Southern Region.

Herbal Tea: Most profitable in the Western Region.

Tea: Most profitable in the Central Region.

No tea sales were recorded in the Southern Region, indicating either supply chain constraints or no consumer demand in that market.



# MARKET-LEVEL PERFORMANCE

In the Central and Eastern regions, major markets contribute more profit.

In the Southern and Western regions, small markets contribute more profit.

Overall, the major market is the most profitable market size, contributing about 59% of the total profit.

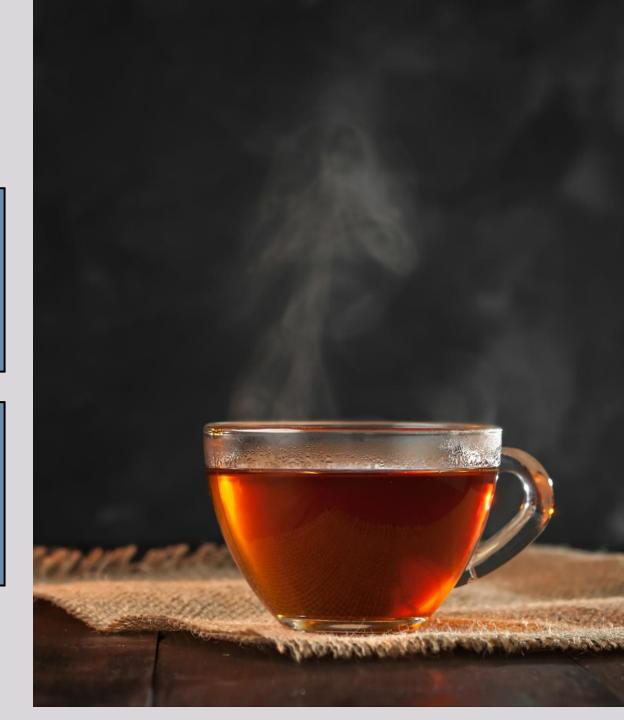
### STATE -LEVEL ANALYSIS

California is the most profitable state, contributing 12.2% of total profit.

Illinois follows closely, contributing 11.6% of total profit.

New Mexico is the least profitable state, generating less than 1% of total profit.

A strategic reassessment of product offerings in low-performing states may help optimize overall profitability.



### RECOMMENDATIONS

• Explore alternative suppliers to reduce costs without compromising quality.

• Invest in process improvements to reduce production inefficiencies and waste.

# Strengthen Focus on High-Profit Products Strengthen • Prioritize coffee and espresso, which consistently generate strong profit margins. • Consider promotional campaigns, bundling, and loyalty programs to maximize sales. **Optimize Pricing Strategies** • Adjust the pricing of products, especially tea and green tea, to improve profit margins. Optimize • Given the poor performance of green tea, the company should consider either repositioning it in the market or discontinuing it altogether. • Consider dynamic pricing models based on seasonality to capitalize on demand trends. Reduce Direct Costs to Improve Profitability • Optimize supply chain operations to reduce logistics costs. Reduce • Negotiate better deals with suppliers to lower raw material expenses.

## RECOMMENDATIONS

Improve	Improve expense management by conducting a detailed expense audit to identify areas where cost can be reduced without compromising product quality.
Expand	<ul> <li>Expand Market Presence in Underperforming Regions</li> <li>Explore expansion strategies in regions where smaller markets contribute more profit (e.g., Western and Southern Regions) and regions where major markets contribute more profit.</li> <li>Improve distribution and marketing efforts in low-performing states like New Mexico.</li> <li>Consider regional preferences when launching new products.</li> </ul>
Feedback	Collect customer feedback to better understand their preferences

