Project Title:

CodeX Energy Drink Survey Analysis Report

Objective:

The objective of this analysis is to provide actionable insights and recommendations focused at boosting the CodeX energy drink business in the Indian market. This includes determining which cities would be good for growth, describing successful marketing strategies, and making recommendations for improving the product. We will also explore customer preferences, pricing sensitivity, and purchase patterns, including gradients into our marketing techniques like Taste perception and age group classification.

Dataset Overview:

dim_respondents:

This dataset contains information about respondents who participated in the survey.

Columns include

- Respondent_ID
- Name
- Age_Group
- Gender
- City ID

Respondents are categorized into age groups (15-18, 19-30, 31-45, 46-65, 65+) and genders (Male, Female, Non-binary).

Each respondent is associated with a unique ID and their respective city.

dim cities:

This dataset provides details about cities where respondents are located.

Columns include

- City_ID
- City
- Tier

Cities are categorized into tiers based on their population size, economic status, and infrastructure.

fact_survey_responses:

This dataset contains survey responses provided by respondents.

Columns include

- Response_ID
- Respondent_ID
- Various survey questions related to energy drink i-e
 - o consumption habits
 - brand perception
 - Preferences
 - Purchasing behavior.
- Responses covers
 - o consumption frequency
 - o reasons for consumption
 - o Brand perception
 - Taste experience
 - o Reasons for brand choice

- Desired improvements
- o Health concerns
- o Marketing channels
- o Packaging preferences
- Price range
- Purchase locations
- Typical consumption situations.

Steps taken:

- o Data Cleaning
 - Removing Duplicates.
 - Identifying Appropriate Data Types
 - o Rectifying Irregular Data
- Merging Tables
 - Utilize the VLOOKUP function in Excel to merge datasets based on common identifiers
- Pivot tables
 - o Employ pivot tables to summarize and analyze merged datasets effectively.

Visualization techniques:

- O **Bar charts:** These are used to compare different categories of data, such as the gender distribution of customers (female, male, non-binary) or the most popular marketing channels (online ads, outdoor billboards, print media, TV commercials).
 - Vertical Bar Chats
 - o Horizontal Bar Chats
 - o Multiple Value vertical Bar Charts
- O **Pie charts:** A pie chart is used to show the breakdown of Codex's beverage brands (Blue Bull, Codex, Cola-Cola, Gangster, Others)

Dashboard:

