



CODEBASICS RESUME PROJECT CHALLENGE

FOOD & BEVERAGE AD_HOC INSIGHTS FOR CodeX

Created By
Mihir Gupta



AGENDA

An illustration of a woman with short brown hair, wearing a dark blue vest over a light blue long-sleeved shirt and a black skirt, running on a light blue wavy path. The path leads towards a large red target with concentric circles in the upper right. There are several light blue clouds in the background. The word 'AGENDA' is written in large, bold, black capital letters at the top center.

- INTRODUCTION
- OBJECTIVE
- AD_HOC REQUEST
- RECOMMENDATION

INTRODUCTION

About Company:

CodeX is a German beverage company that is aiming to make its mark in the Indian market. A few months ago, they launched their energy drink in 10 cities in India.

CodeX conducted a survey in those 10 cities and received results from 10k respondents.

The survey was based on consumer behavior questions like their purchasing habits, their feedback about energy drinks available in the market, pricing, packaging etc.

City	Count of Response_ID
Bangalore	2828
Hyderabad	1833
Mumbai	1510
Chennai	937
Pune	906
Kolkata	566
Ahmedabad	456
Delhi	429
Jaipur	360
Lucknow	175
Total	10000

OBJECTIVE

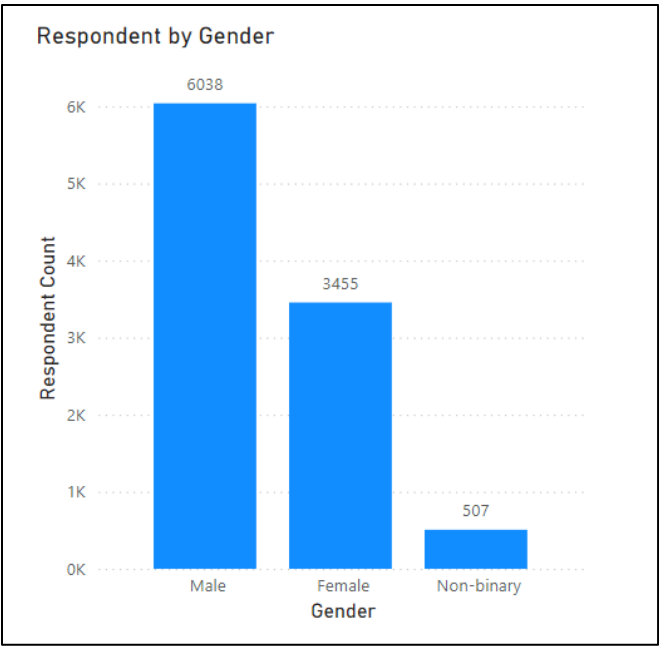
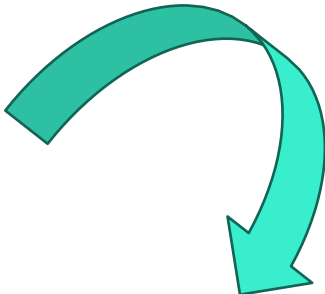
- **Enhance Decision-Making:** Improve the quality of decision-making by providing the management with quick and data-informed insights.
- **Evaluate Candidate Skills:** Conduct a SQL challenge to assess candidates' proficiency in technical abilities and communication, ensuring the selection of suitable candidates with a balanced skill set.



Demographic Insights

Request 1:
Who prefers energy drink more? (male/female/non-binary?)

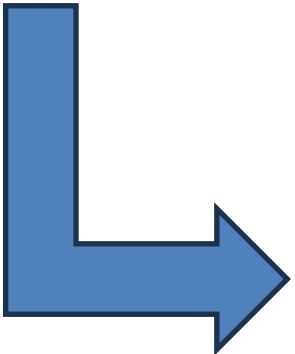
```
SELECT
  gender, COUNT(s.Consume_frequency) as respondent
FROM
  dim_repondents AS r
  LEFT JOIN
  fact_survey_responses AS s ON r.Respondent_ID = s.Respondent_ID
GROUP BY r.gender;
```



	gender	respondent
▶	Female	3455
	Male	6038
	Non-binary	507

Request 2: Which type of marketing reaches the most Youth (15-30)?

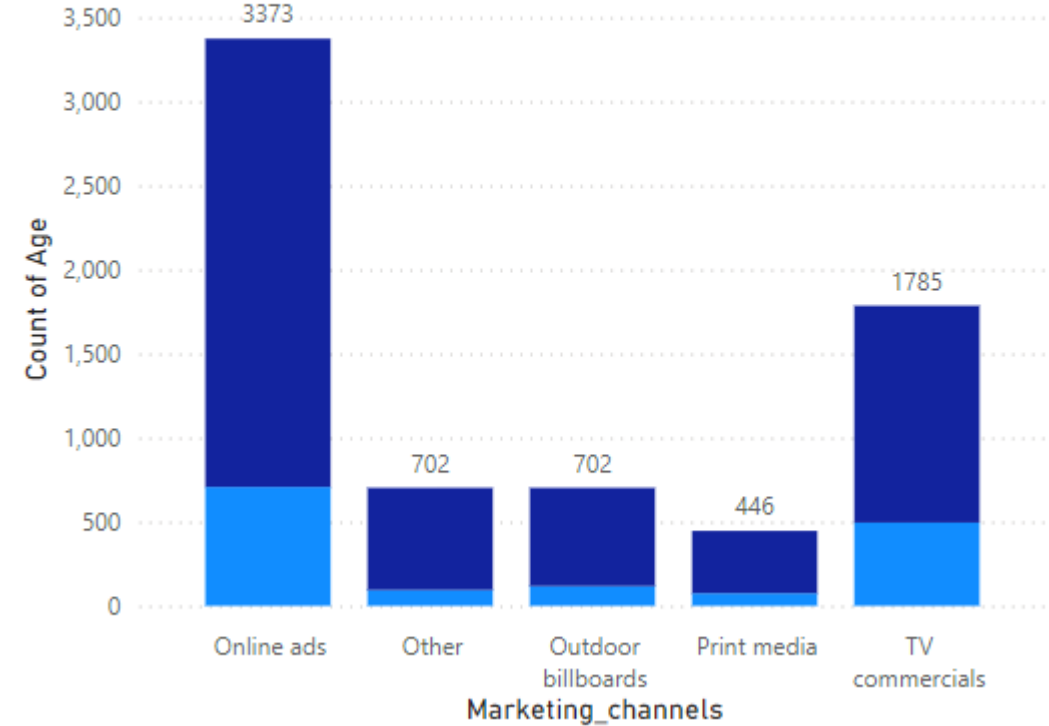
```
SELECT
    r.age,
    s.Marketing_channels,
    COUNT(s.Marketing_channels) AS channel_count
FROM
    dim_repondents AS r
INNER JOIN
    fact_survey_responses AS s ON r.Respondent_ID = s.Respondent_ID
WHERE
    r.age IN ('15-18', '19-30')
GROUP BY
    r.age, s.Marketing_channels
order by r.age desc;
```



age	Marketing_channels	channel_count
19-30	Online ads	2666
19-30	Other	608
19-30	Outdoor billboards	585
19-30	Print media	371
19-30	TV commercials	1290
15-18	Online ads	707
15-18	Other	94
15-18	Outdoor billboards	117
15-18	Print media	75
15-18	TV commercials	495

Marketing channel by Age

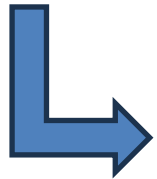
Age ● 15-18 ● 19-30



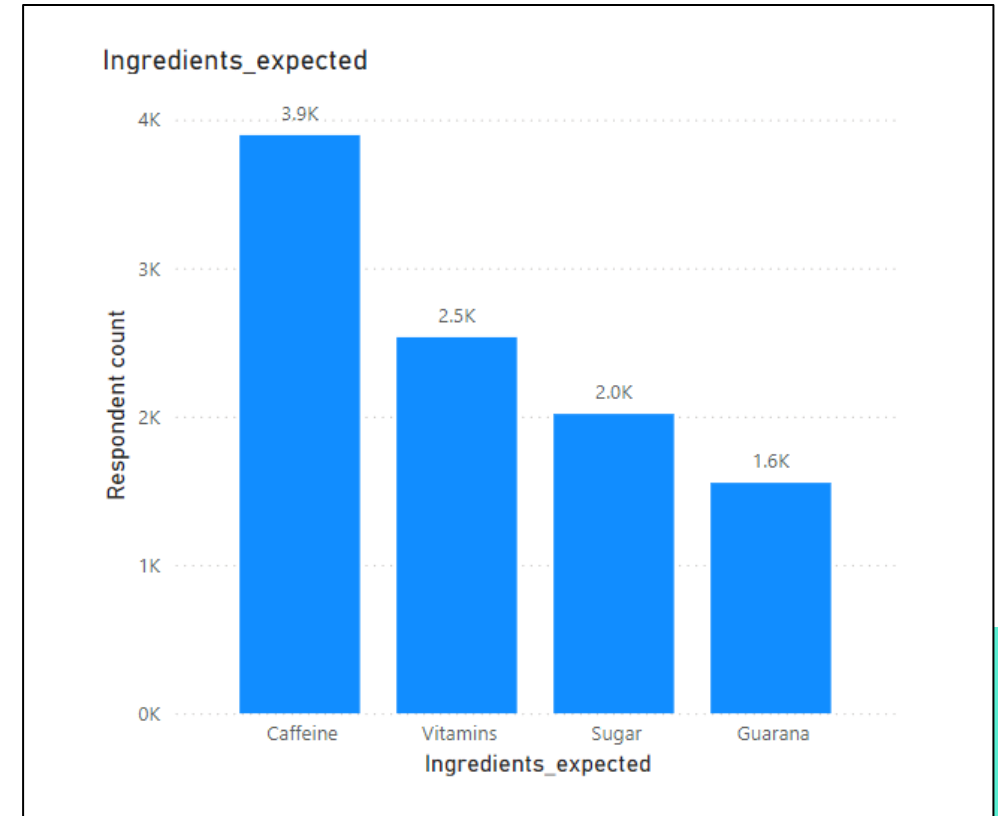
Request 3:

What are the preferred ingredients of energy drinks among respondents?

```
SELECT
  Ingredients_expected,
  COUNT(Ingredients_expected) AS count_ingredients,
  ROUND((COUNT(Ingredients_expected) * 100.0 / SUM(COUNT(Ingredients_expected)) OVER ()), 2) AS percentage
FROM
  fact_survey_responses
GROUP BY
  Ingredients_expected
ORDER BY
  count_ingredients DESC;
```



	Ingredients_expected	count_ingredients	percentage
▶	Caffeine	3896	38.96
	Vitamins	2534	25.34
	Sugar	2017	20.17
	Guarana	1553	15.53



Request 4:

Which cities do we need to focus more on?

```
SELECT
    c.city,
    SUM(CASE
        WHEN s.Brand_perception = 'Neutral' THEN 1
        ELSE 0
    END) * 100 / 10000 AS neutral,
    SUM(CASE
        WHEN s.Brand_perception = 'Positive' THEN 1
        ELSE 0
    END) * 100 / 10000 AS positive,
    SUM(CASE
        WHEN s.Brand_perception = 'Negative' THEN 1
        ELSE 0
    END) * 100 / 10000 AS negative
FROM
    dim_cities AS c
    JOIN
    dim_repondents AS r ON c.city_id = r.City_ID
    RIGHT JOIN
    fact_survey_responses AS s ON r.Respondent_ID = s.Respondent_ID
GROUP BY c.city
ORDER BY Neutral DESC , positive DESC , negative DESC;
```

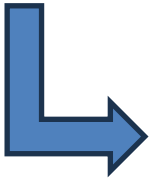
	city	neutral	positive	negative
▶	Bangalore	18.4400	5.6600	4.1800
	Hyderabad	11.9100	3.7600	2.6600
	Mumbai	8.4700	4.3500	2.2800
	Chennai	6.1500	1.9600	1.2600
	Pune	4.1900	2.0500	2.8200
	Kolkata	3.9300	1.0600	0.6700
	Delhi	2.1000	1.4500	0.7400
	Ahmedabad	2.0800	0.9900	1.4900
	Jaipur	1.6300	0.9100	1.0600
	Lucknow	0.8400	0.3800	0.5300

Highlighted cities have more negative impression than positive.

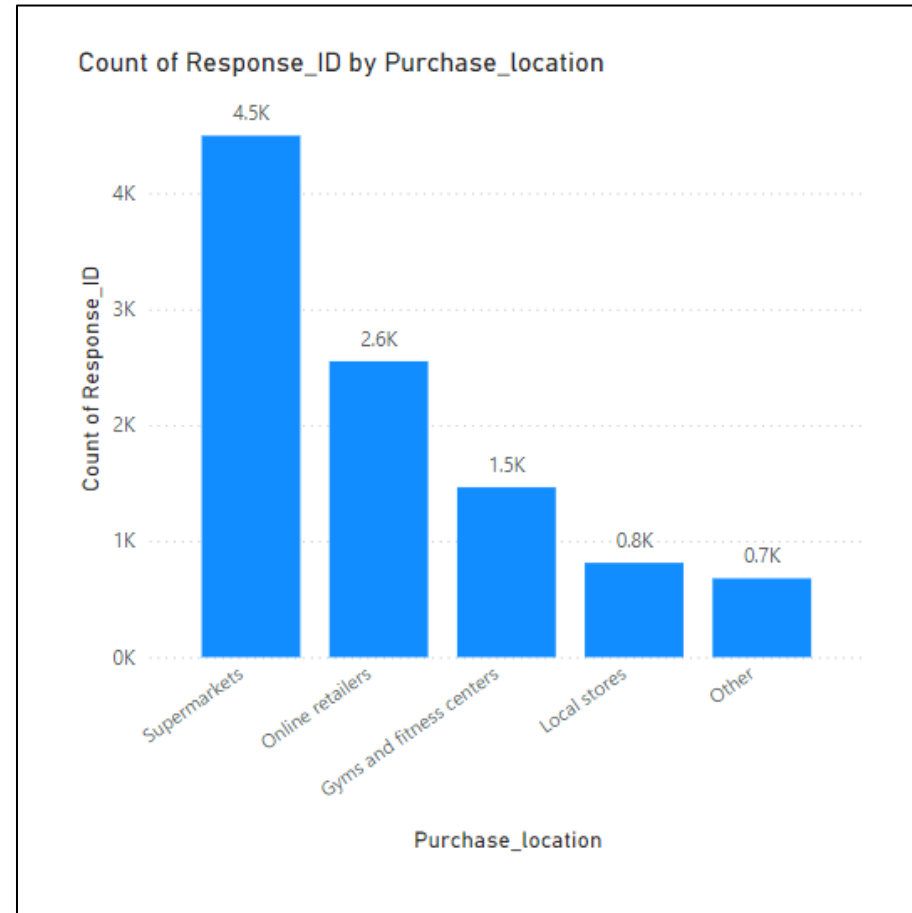
Request 5:

Where do respondents prefer to purchase energy drinks?

```
SELECT
    Purchase_location, COUNT(Purchase_location)
FROM
    fact_survey_responses
GROUP BY Purchase_location
ORDER BY Purchase_location DESC;
```



	Purchase_location	count(Purchase_location)
▶	Supermarkets	4494
	Other	679
	Online retailers	2550
	Local stores	813
	Gyms and fitness centers	1464



Recommendations For CodeX

Ideal price of our product

- The price range expected by consumers lies between **50 to 150**.
- In cities like Ahmedabad, Chennai, Hyderabad, Kolkata, Lucknow, Mumbai, and Pune consumers expect the price range to be between **50 to 99**.
- While in the rest of the cities, people are willing to pay up to **150**.

Price Preference by Age						
Price_range	15-18	19-30	31-45	46-65	65+	Total
100-150	348	1365	1257	137	35	3142
50-99	687	2965	499	85	52	4288
Above 150	281	655	428	151	46	1561
Below 50	172	535	192	53	57	1009
Total	1488	5520	2376	426	190	10000

Offers and discounts we can run

In the previous recommendation, we saw that we can **experiment** with the price in **different cities**. Also, if changing the price does not go with the brand's strategy, we can provide offers on buying the **pack of 6 cans at a cheaper cost**.

Also, each of these cities celebrates multiple **festivals** throughout the year. We can come up with the gift set packs.

THANK YOU

