Portfolio Project

CodeX Company

(Marketing Data Analyst)

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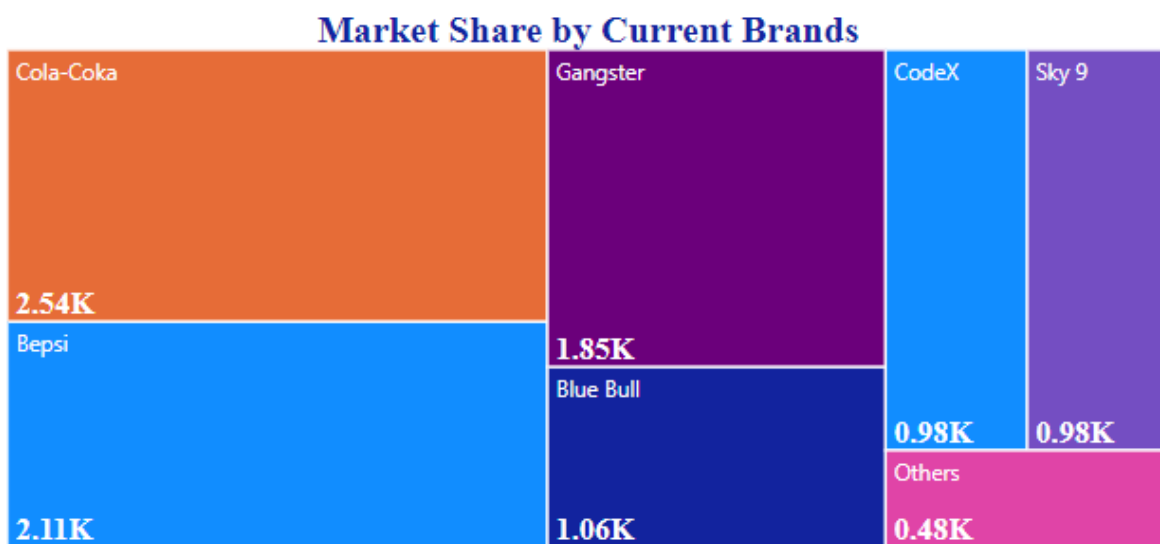**Phone: 0349-2266368**
Portfolio given by atomcamp.

Provide Insights to the Marketing Team in Food & Beverage Industry

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. I am working as a marketing data analyst.

Competition is increasing day by day in the worldwide beverage sector, and there are already many companies leading in the beverage sector. Codex Beverage Company also decided to enter the Indian market due to its huge population, believing it can capture more market share easily.

Market share of current Brands

Market Share by Current Brands

Cola-Coka	Gangster	CodeX	Sky 9
2.54K	1.85K	0.98K	0.98K
Bepsi	Blue Bull	Others	
2.11K	1.06K	0.48K	

Data Collection:

Our target demographic for our research is the Indian market, and we have focused on only 10 cities. The primary method for data collection was online surveys. We created three surveys named "DIM Respondents," "DIM Cities," and "Fact Survey Responses." These surveys were circulated online, and we received responses from 10,000 respondents across the 10 cities of India.

The factors included in the fact survey responses encompassed various details, such as names, IDs, age, gender, city ID, response ID, respondent ID, and consumption frequency.

Varaibles	Factors
Response_ID	Represents the unique identifier assigned to each response in the survey.
Respondent_ID	Represents the unique identifier assigned to each respondent who provided the survey response.
Name	Represents the name of the respondent who participated in the survey.
Age	Represents the categorized age group of the respondent. Age groups (15-18, 19-30, 31-45,46-65,65+)
Gender	Represents the gender of the respondent. (Male, Female, Non-binary)
City_ID	Represents the ID of the city.
City	Represents name of the city where the respondent is located.
Tier	Represents the tier category of the city
Consume_frequency	How often do you consume energy drinks? Daily, 2-3 times a week,..., Rarely
Consume_time	When do you typically consume energy drinks?
Consume_reason	What are the main reasons for consuming energy drinks?
Heard_before	Have you heard of our energy drink before today? Yes or No
Brand_perception	What do you think of the brand name/logo/design?
General_perception	What is your perception of energy drinks in general?
Tried_before	Have you ever tried our energy drink before?
Taste_experience	If yes, how would you rate the taste, flavor, and overall experience?
Reasons_preventing_trying	If no, what are the main reasons preventing you from trying it?
Current_brands	Which energy drink brands do you currently consume or prefer?
Reasons_for_choosing_brands	What are the reasons for choosing those brands over others?
Improvements_desired	What improvements would you like to see in energy drinks currently available in the market?
Ingredients_expected	What ingredients do you expect in an energy drink?
Health_concerns	Are you concerned about the health impacts of energy drinks?
Interest_in_natural_or_organic	Would you be interested in an energy drink with natural or organic ingredients?
Marketing_channels	Which marketing channels or platforms do you often come across energy drink advertisements?
Packaging_preference	What type of packaging or bottle design would attract you to purchase an energy drink?
Limited_edition_packaging	Would you be more likely to buy an energy drink with limited edition packaging?
Price_range	What price range do you consider reasonable for an energy drink?
Purchase_location	Where do you typically purchase energy drinks?
Typical_consumption_situations	In which situations or activities do you typically consume energy drinks?

Data Cleaning

The raw data collected from our survey was not very useful due to various anomalies. Without cleaning it, the data was of no use. I started from scratch, combining and transferring data from "DIM Respondents" and "DIM Cities" to the "Fact Survey" in order to create a Masterfile.

I used nested IF and VLOOKUP functions to import data from other sheets into the Masterfile. Afterward, I employed filters and sorting functions to check for missing values, spelling mistakes, and empty cells in the data.

## CodeX

Primary Insights.
   1. Demographic Insights

   a. **Who prefers energy drink more? (male/female/non-binary?)**
      Based on the responses, it is concluded that out of the 10,000 participants, 6,000 are male, indicating that males dominate the demographic. Therefore, it can be inferred that males prefer energy drinks more than females. As the graph shows, there are 60% males, 35% females, and 0.5% non-binary individuals. This suggests that Codex should focus more on targeting males compared to other demographic groups.

Preference of Energy Drinks by Gender
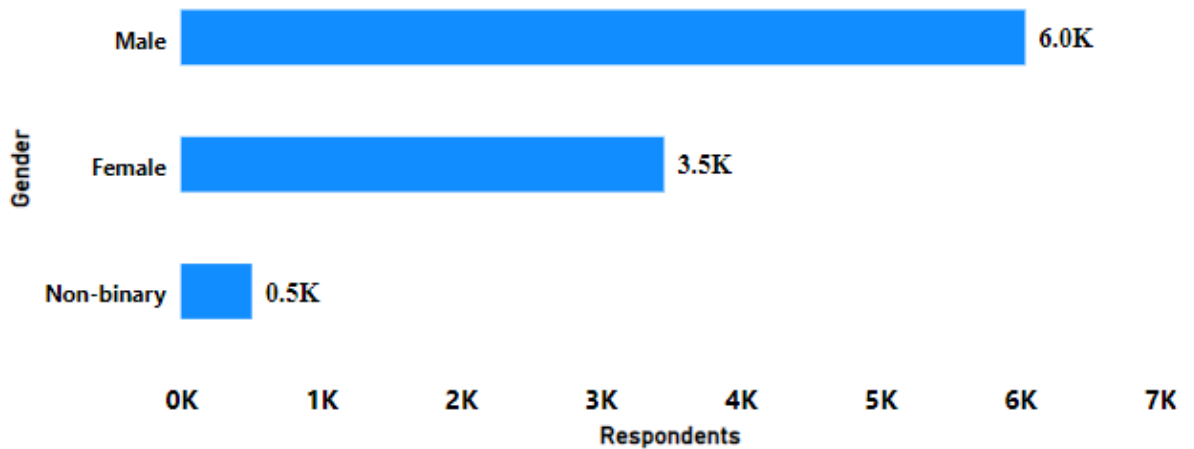
**b. Which age group prefers energy drinks more?**

When we consider energy drink preferences in relation to age, it becomes apparent that people in the age bracket of 19-30 are the highest consumers, followed by those aged 30 to 45. In third place are individuals aged 15-18. Additionally, it's worth noting that within the 19-30 age bracket, 55% of respondents fall into this category, which is higher than the 50% for all other age brackets combined. Furthermore, 24% of the people belong to the age bracket of 30 to 45. If Codex focuses on targeting the 19 to 45 age brackets, it can cover 80% of the population.

Preference of Energy Drinks by Age
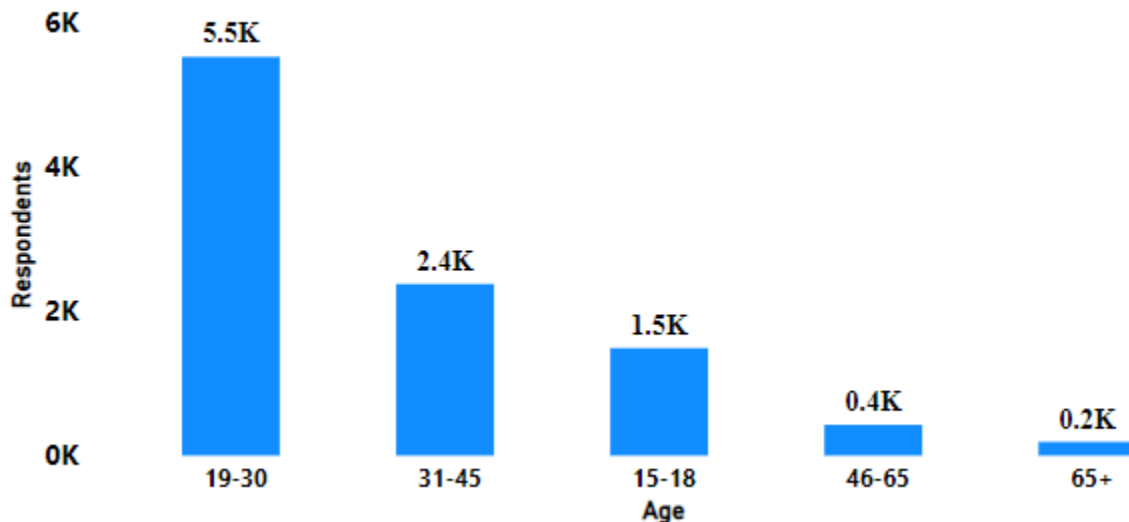
### c. Which marketing reaches the most Youth (15-30)?

As demonstrated in the aforementioned graph, the age group with the highest population falls within the range of 19-30, comprising 55% of the dataset. To assess the marketing channels used to reach individuals aged 15-30, it is observed that 48% of this youth demographic is targeted through online advertisements. TV commercials reach 25.5% of this demographic, while outdoor billboards and other methods each account for 10%. Consequently, the most effective technique for reaching individuals in this age range appears to be through online advertisements.

Marketing Channels Reaching age (15-30)
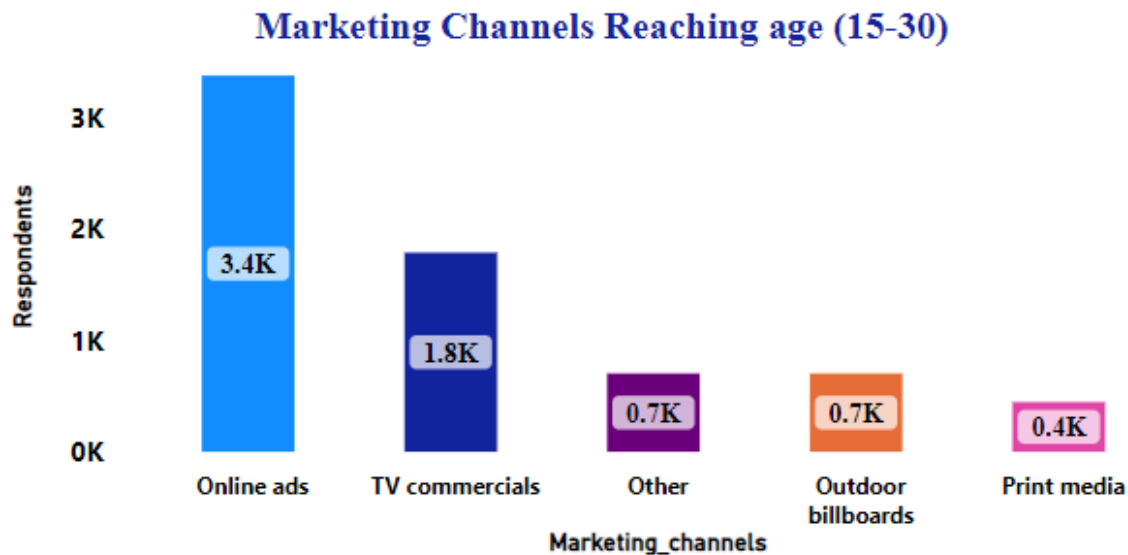
2. Consumer Preferences:
## a. What are the preferred ingredients of energy drinks among respondents?

Ingredients are crucial in the formulation of energy drinks, and they play a pivotal role in influencing consumer preferences. Notably, among the surveyed participants, 3,900 individuals indicated a preference for caffeine, 2,500 individuals for vitamins, 2,000 for sugar, and 1,600 for guarana. The data reveals that caffeine is the most preferred ingredient, surpassing the other options in terms of consumer preference. Therefore, CodeX has to focus more on the Caffeine.

Preferred Ingredients of Energy Drinks
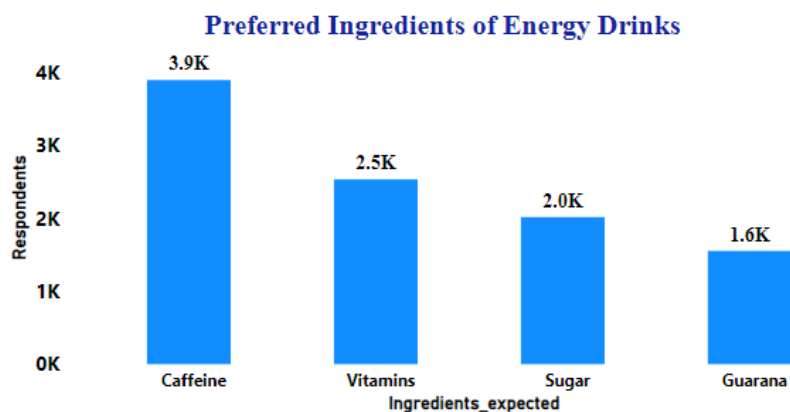
b. What packaging preferences do respondents have for energy drinks?
There are four distinct packaging preferences for energy drinks, with 4,000 individuals expressing a preference for compact and portable cans, and 3,000 individuals favoring innovative bottle designs. In addition, 1,500 people have a preference for collectible packages, 1,000 individuals favor eco-friendly designs, and 500 respondents prefer other packaging methods.

Consequently, Codex can strategically opt for both compact and portable cans and innovative bottle designs since these two packaging preferences collectively capture 70% of the target audience's interest. This approach aligns with the preferences indicated by the majority of the surveyed participants.
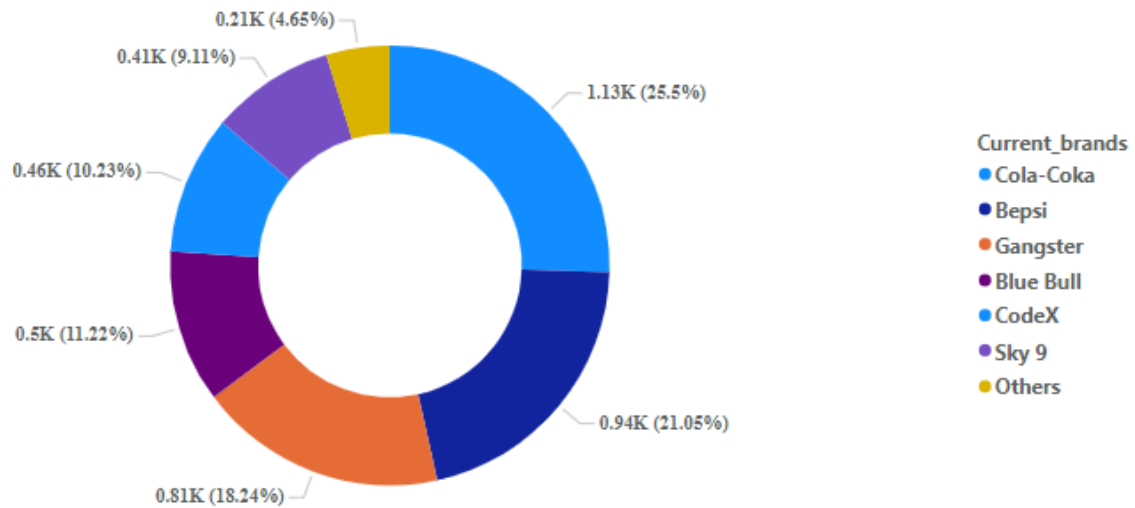

Packaging Preference
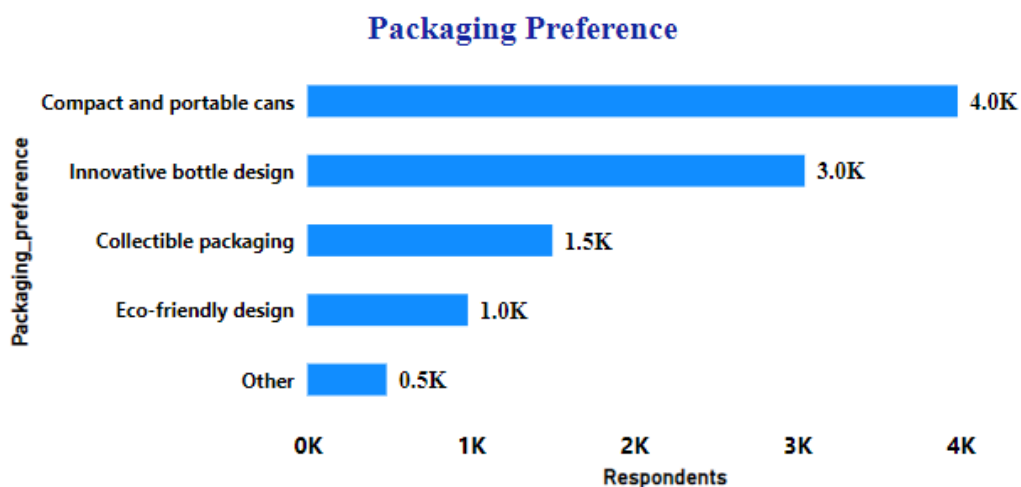
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3. **Competition Analysis:**
a. **Who are the current market leaders?**
In the current market landscape, Coca-Cola holds the dominant position with a substantial market share of 25.5%. Pepsi follows closely, capturing a significant portion of the market at 21%. In the third position, Gangster secures a market share of 18%, while Blue Bull maintains its presence with an 11.22% market share. Codex, currently positioned at the fifth spot, holds a market share of 10%.

Codex has the potential to replace Blue Bull, given its relatively close market share. However, in order to attain the highest market share, Codex must engage in a strategic market penetration effort. This will be essential for Codex to establish a stronger foothold in the market and potentially surpass the current leaders.

Current Market Leaders

0.21K (4.65%)
0.41K (9.11%)
1.13K (25.5%)
0.46K (10.23%)

Current_brands
- Cola-Coka
- Bepsi
- Gangster
- Blue Bull
- CodeX
- Sky 9
- Others

0.5K (11.22%)
0.94K (21.05%)
0.81K (18.24%)

b. What are the primary reasons consumers prefer those brands over ours?
The most significant factor influencing consumer preference for other brands over ours is brand reputation. Following this factor, the next important considerations include taste and flavor preferences, product availability, and product effectiveness. Additionally, there are other factors that also contribute to consumer choices. This hierarchy of factors underscores the importance of brand reputation as a key driver in consumers' decision-making processes.

Reasons for Choosing Other Brands

Reasons_for_choosing_brands	Respondents
Brand reputation	2.7K
Taste/flavor preference	2.0K
Availability	1.9K
Effectiveness	1.7K
Other	1.7K
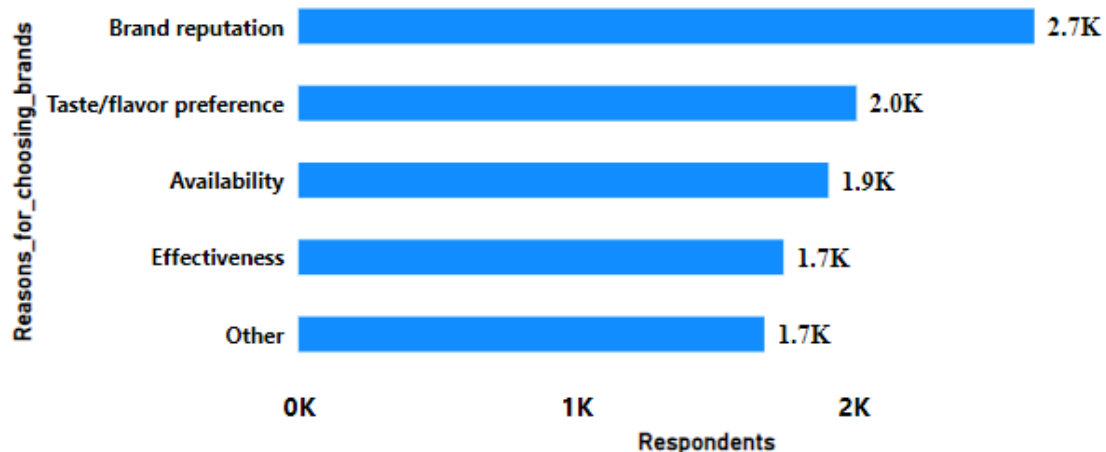
4. Marketing Channels and Brand Awareness:
a. Which marketing channel can be used to reach more customers?

Leveraging online advertising can serve as an effective means to expand the reach of the brand and connect with a larger customer base. By adopting a dual-channel strategy, Codex can potentially reach up to 70% of its target audience. The first channel entails the utilization of online ads through the application of market segmentation techniques across various social media platforms, including YouTube and LinkedIn. Subsequently, the second channel involves the incorporation of TV commercials. This strategic approach to marketing emphasizes the importance of online advertising, particularly through the segmentation of social media and video-sharing platforms, as an initial means of engaging with a substantial portion of the desired customer demographic.

Marketing Channels
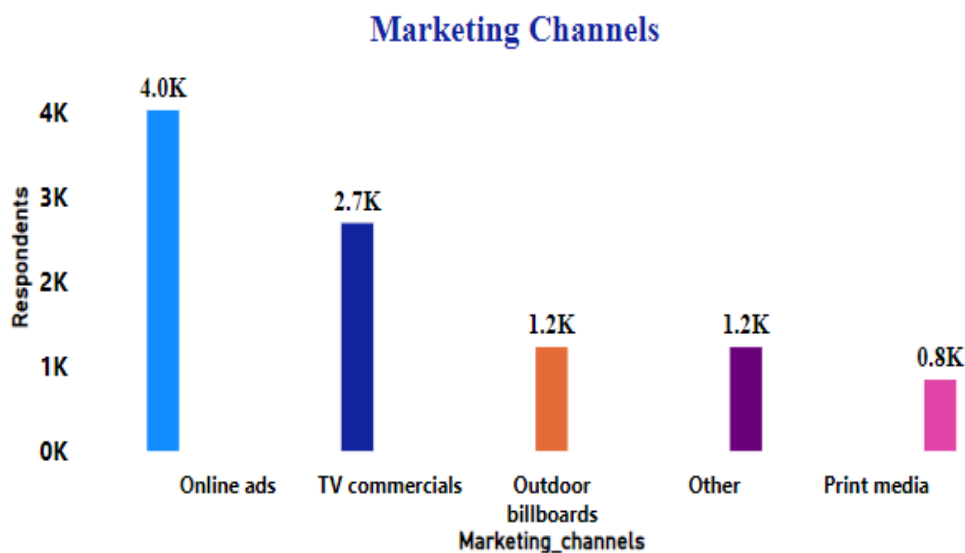
b. How effective are different marketing strategies and channels in reaching our customers?

Online advertising emerges as the most effective marketing strategy, primarily due to the pervasive use of social media platforms such as Facebook, Instagram, Twitter, and YouTube by a vast majority of the population. These platforms offer extensive reach and engagement potential. Moreover, YouTube, as a prominent online video-sharing platform, provides a further avenue for effective online advertising campaigns.

TV commercials, positioned as the second-best approach for customer outreach, retain their significance. These commercials can be strategically integrated into popular television programs, including dramas, sports matches, and league broadcasts, and have historically demonstrated their effectiveness in capturing the attention of a diverse viewership.

5. Brand Penetration:
a. What do people think about our brand? (overall rating)
In the overall responses, 191 individuals rated the taste as excellent, among whom 41 had a positive brand perception of CodeX. Additionally, 120 respondents expressed a neutral viewpoint, while 30 had a negative perception.

Among the 248 respondents who found the taste to be good, 54 had a positive brand perception, while 146 remained neutral, and 48 held a negative perception.
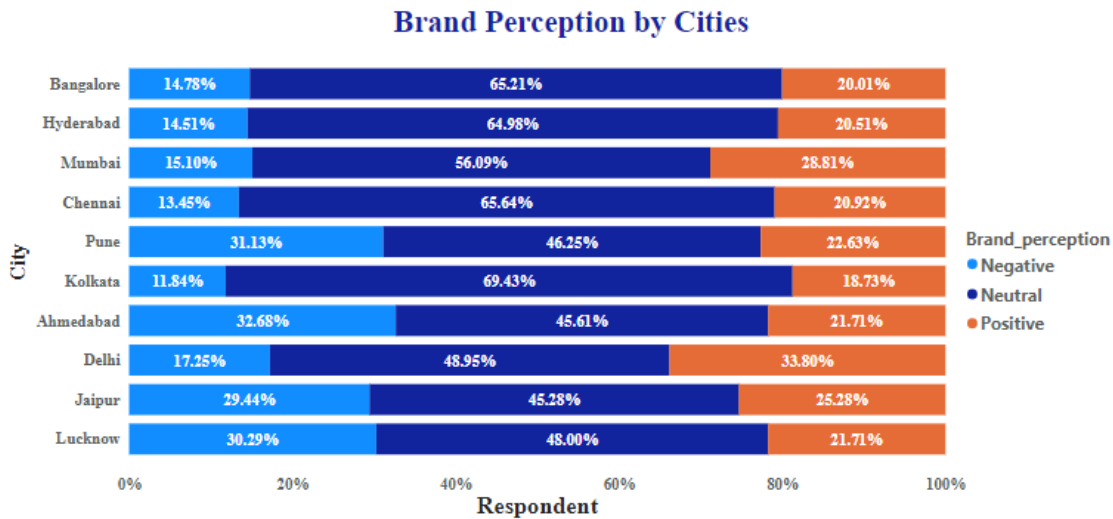
The largest group of 286 respondents reported an average taste experience, with 64 having a positive brand perception and 173 remaining neutral. On the contrary, 148 individuals gave a below-average rating. A total of 107 people rated the taste experience as poor.

This data indicates that a significant portion of respondents favored the taste, and a majority held either a neutral or positive brand perception of CodeX.
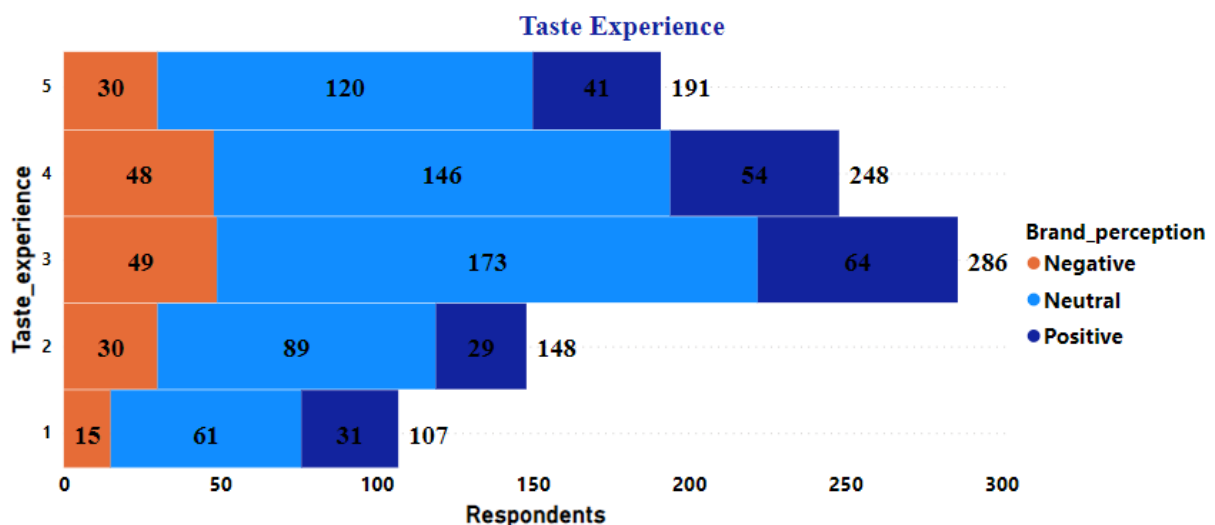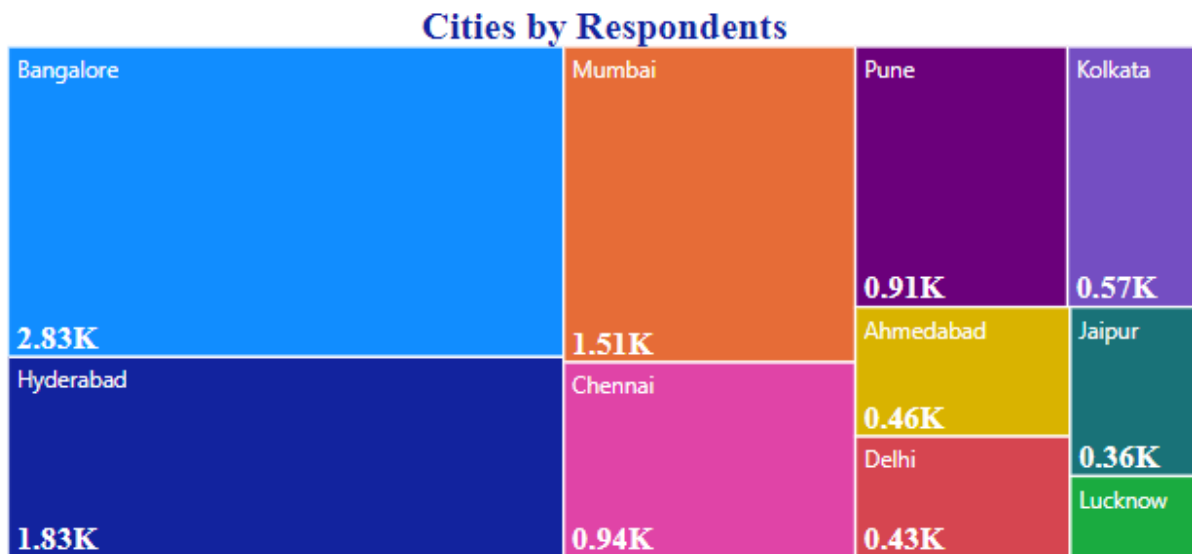

b. Which cities do we need to focus more on?
Kolkata, Bangalore, and Hyderabad are the cities in which Codex should intensify its focus. Codex has the opportunity to enhance market penetration and market development by increasing the number of individuals consuming energy drinks in these areas. Market penetration is a strategic approach employed to augment the customer base for the same product within the existing geographical region. On the other hand, market development involves expanding the customer base for the same product into new geographical areas. This dual strategy can enable Codex to broaden its presence and influence in these specific cities.

Brand Perception by Cities

City	Negative	Neutral	Positive
Bangalore	14.78%	65.21%	20.01%
Hyderabad	14.51%	64.98%	20.51%
Mumbai	15.10%	56.09%	28.81%
Chennai	13.45%	65.64%	20.92%
Pune	31.13%	46.25%	22.63%
Kolkata	11.84%	69.43%	18.73%
Ahmedabad	32.68%	45.61%	21.71%
Delhi	17.25%	48.95%	33.80%
Jaipur	29.44%	45.28%	25.28%
Lucknow	30.29%	48.00%	21.71%

In the overall analysis, the primary focus should be on Bangalore, which has the largest population, followed by Hyderabad, and subsequently, Mumbai. However, this prioritization should be guided by the perceptions and insights gleaned from the analysis provided above.

Cities by Respondents

City	Respondents
Bangalore	2.83K
Hyderabad	1.83K
Mumbai	1.51K
Chennai	0.94K
Pune	0.91K
Kolkata	0.57K
Ahmedabad	0.46K
Delhi	0.43K
Jaipur	0.36K
Lucknow	

6. Purchase Behavior:

**a. Where do respondents prefer to purchase energy drinks?**

The majority of individuals exhibit a preference for purchasing energy drinks from supermarkets, accounting for 45% of the total respondents. Among these respondents, 27% are male, while 16% are female. Following this, a substantial percentage of respondents, totaling 26%, opt for online retailers, with 16% being male and 9% female. Gyms and fitness centers occupy the third position as a preferred purchase location, with local stores ranking fourth. Additionally, various

other methods are utilized for making energy drink purchases.

Purchase Location
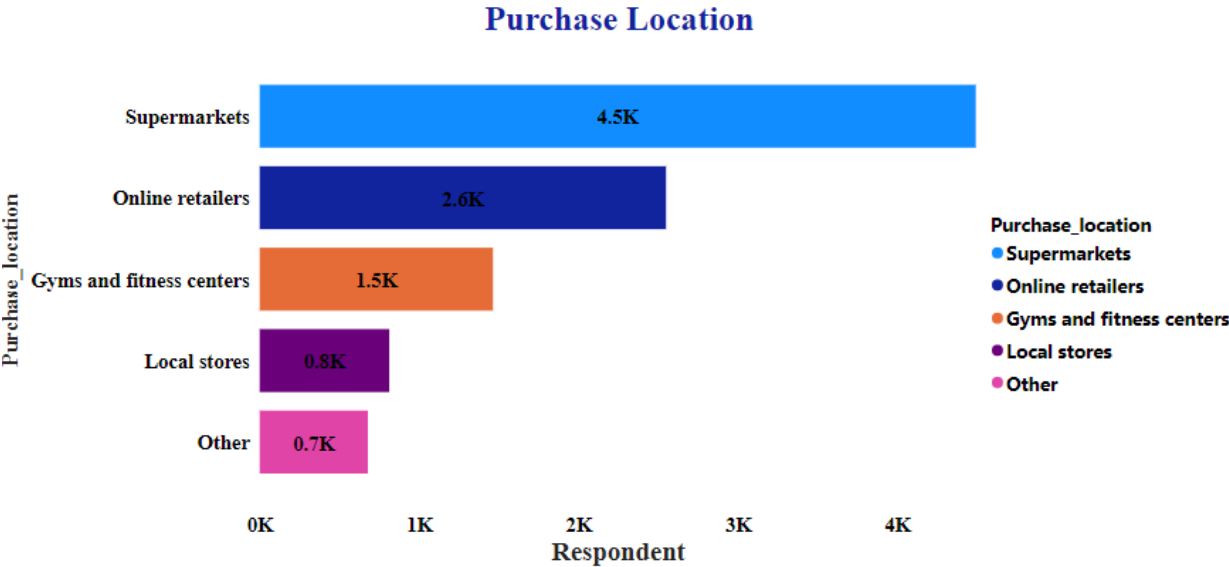
b. What are the typical consumption situations for energy drinks among respondents?
Consumers incorporate energy drinks into their routines during various situations. Some individuals favor consuming them during sports or exercise, while others prefer them while studying or working. Some also choose to consume energy drinks during social gatherings, while driving or commuting individuals are the least likely to use them. A substantial 45% of people opt to consume energy drinks during sports or exercise. Remarkably, 70% of the surveyed individuals indicate that they use energy drinks during sports and while studying or working. This information provides insights into the diverse contexts in which consumers choose to incorporate energy drinks into their daily activities.

Typical Consumption Situation
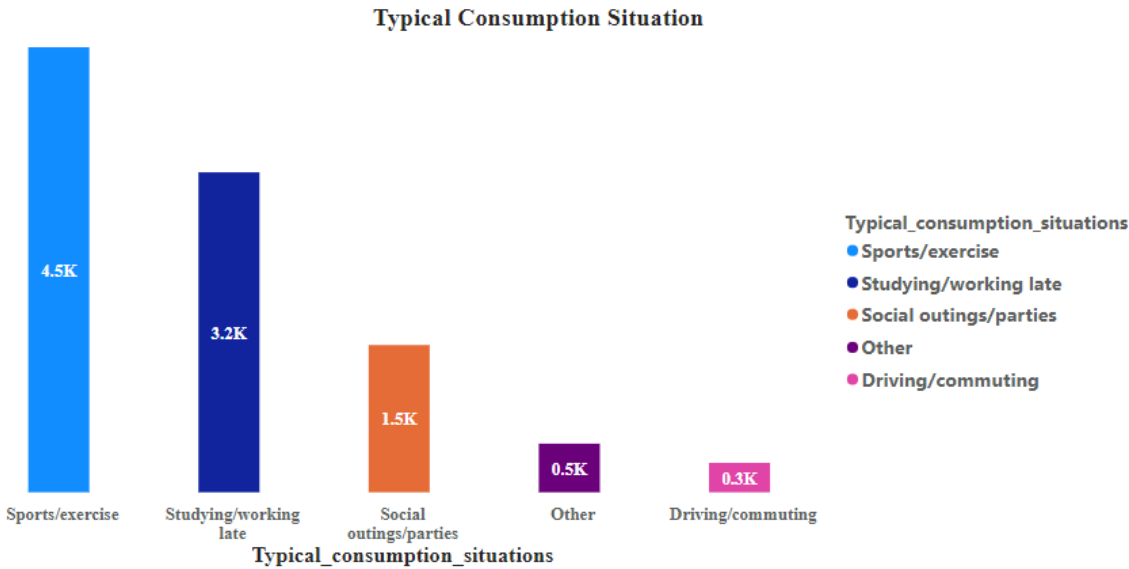
d. What factors influence respondents' purchase decisions, such as price range and limited-edition packaging?
The ideal price range for the product should fall within the bracket of 50 to 99, which is favored by 45% of the surveyed individuals. Another segment, constituting 30% of the

respondents, indicates a preference for prices ranging from 100 to 150. It is imperative that the product's price remains within the range of 50 to 150, as this range accommodates the preferences of the majority, neither exceeding nor falling below this specified threshold. This pricing strategy aligns with the preferences expressed by the surveyed consumer base.

Price Range and Limited Edition Package
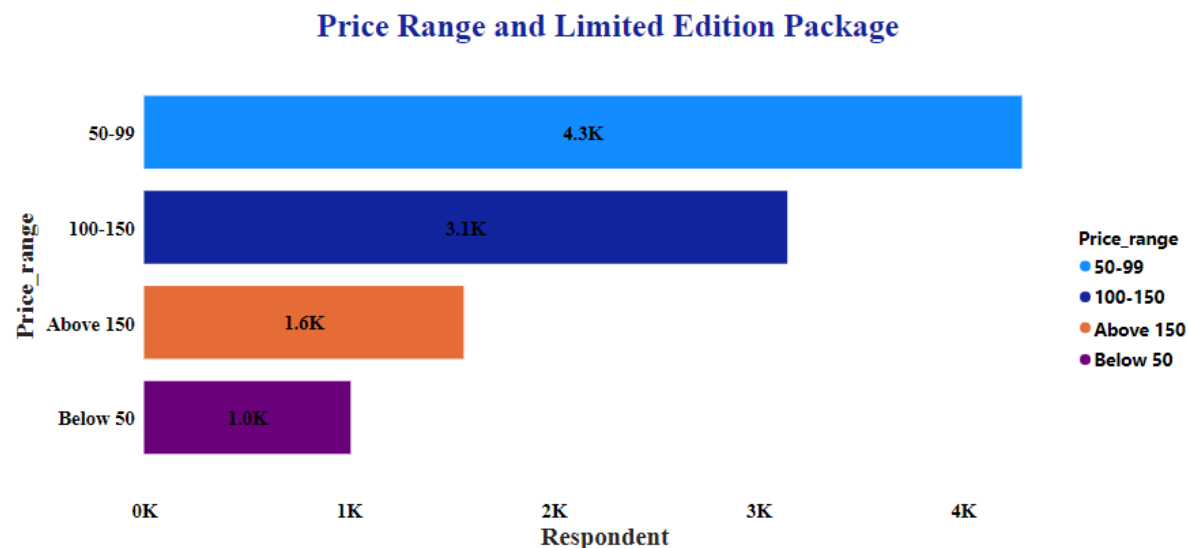
When examining price considerations in relation to limited package offerings, the data shows that a substantial portion of consumers, 40%, favor a price range between 100 and 150 for limited edition packaging. An additional 20% of respondents appear uncertain about this preference, while the remaining 40% express a lack of interest in limited edition packaging within the 100 to 150 price range. This is consistent with the pattern observed in the broader price range, where the preference for limited edition packaging remains unchanged within the 100-150 price range. These findings highlight the significance of considering consumer preferences when offering limited edition packaging in this specific price range.
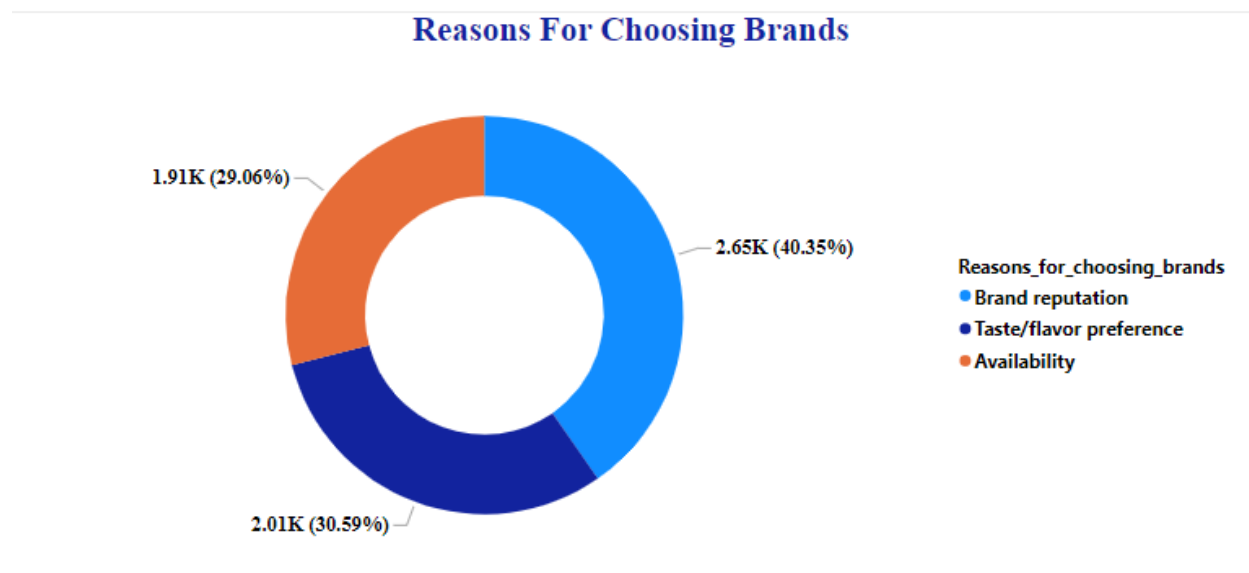
Price Range and Limited Edition Package
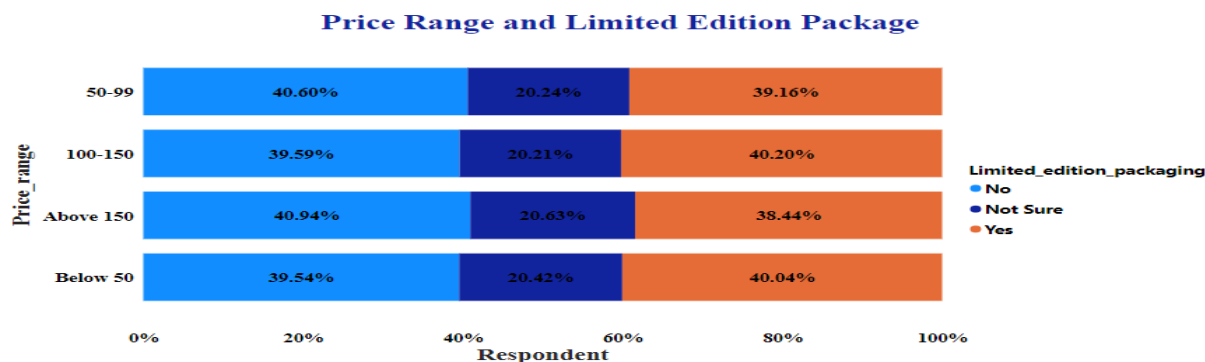
7. Product Development
a. Which area of business should we focus more on for our product development?
(Branding/taste/availability)
Codex should prioritize building and enhancing its brand reputation, followed by focusing on taste/flavor preferences and product availability, tailored to specific situations. The development of a strong brand reputation is a critical strategic step, as it can significantly contribute to the expansion of market share. As the brand garners increased recognition and credibility, it is likely to experience a commensurate growth in its market presence. This strategic emphasis on brand reputation forms the basis for extending Codex's market share.

Reasons For Choosing Brands

1.91K (29.06%)

2.65K (40.35%)

2.01K (30.59%)

Reasons_for_choosing_brands
● Brand reputation
● Taste/flavor preference
● Availability

Recommendations for CodeX:
● **What immediate improvements can we bring to the product?**
Before considering a change in ingredients, Codex should prioritize the improvement of its brand reputation. This strategic decision is supported by the fact that 40% of the respondents indicate a preference for purchasing products based on the company's brand reputation. Enhancing brand reputation is a crucial initial step that can lay the foundation for subsequent modifications or improvements, such as ingredient changes, in order to align the product more closely with consumer preferences.

● **What should be the ideal price of our product?**
The pricing strategy for our product will be within the range of 80 to 120. This strategy is expected to reach approximately 70% of the population. This projection is based on the fact that 43% of the surveyed individuals prefer prices falling in the 50 to 99 range, and within this segment, 30% belong to the age group of 19-30, while 32% prefer the price range of 100-150. This pricing strategy aligns with the preferences of a significant portion of the target demographic.

● **What kind of marketing campaigns, offers, and discounts we can run?**

Codex can execute a marketing campaign through online advertisements and collaborate with athletes to enhance brand reputation. Additionally, offering discounts on products falling within the price range of 150 to 200 could potentially stimulate sales, allowing the company to compensate for any losses while concurrently expanding its market penetration. This multifaceted approach incorporates various strategic elements that can collectively contribute to Codex's growth and success in the market.

● **Who can be a brand ambassador, and why?**

Virat Kohli can be an ideal brand ambassador for Codex due to his immense popularity and influence among the youth of India. His strong presence and appeal in the sports and entertainment industry can significantly enhance Codex's brand recognition and credibility. Virat Kohli's association with Codex would help the company establish a deeper and more relatable connection with its target audience.

● **Who should be our target audience, and why?**

The target audience should predominantly fall within the age bracket of 19 to 45, which accounts for approximately 80% of the total population. It is essential to focus primarily on males within this demographic, as they exhibit a stronger preference for the product. This strategic approach aligns with the data indicating that males have a higher inclination towards the product, making them the primary audience to target.