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Excel Portfolio Report

Report on CodeX Energy Drink Market Analysis

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Introduction

CodeX, a German beverage company, has recently entered the Indian market with its energy drink. The Marketing team is keen on understanding consumer preferences, market dynamics, and effective marketing strategies to establish a strong presence in India. This report aims to analyze survey data collected from 10 cities in India to derive meaningful insights and recommendations for CodeX.

Dataset Overview:

The dataset comprises responses from 10,000 individuals across different demographics. Various aspects such as consumer preferences, demographic insights, competition analysis, and marketing channels are explored in the survey.

Data Cleaning and Transformation:

Before analysis, data cleaning was performed to ensure accuracy. This involved handling missing values and inconsistencies, removing duplicates and replacing the city codes with city names.

Demographic Insights:

Understanding the demographic landscape is crucial for tailoring marketing strategies and product offerings to specific consumer segments. By analyzing gender preferences, age group preferences, and marketing channel preferences among different demographic groups, businesses can better target their efforts and optimize their resources for maximum impact.

- **.Who prefers energy drink more? (male/female/non-binary?)**

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Gender plays a significant role in consumer behavior, influencing preferences, purchase decisions, and consumption patterns. Understanding the differences in consumption behavior between genders can help businesses tailor their products and marketing strategies to better appeal to male, female, and non-binary consumers.

- **Which age group prefers energy drinks more?**

Consumer preferences vary across different age groups, with younger demographics often exhibiting distinct consumption behaviors compared to older age groups. Understanding age group preferences can help businesses develop targeted marketing campaigns and product offerings that resonate with specific age demographics.

- **Which type of marketing reaches the most Youth (15-30)?**

Younger demographics, particularly those aged 15-30, have unique preferences when it comes to marketing channels and communication mediums. Understanding the preferred marketing channels of youth consumers can help businesses allocate resources effectively and engage with this demographic more successfully.

1. Gender Preferences:

- Male respondents show higher consumption frequency compared to females and non-binary individuals.
- Male respondents dominate in all consumption frequency categories.

Question No.1		Who prefers energy drink more? (male/female/non-bi Male						
Count of Consume_frequency		Column Labels						
Row Labels		2-3 times a month	2-3 times a week	Daily	Once a week	Rarely	Grand Total	
Female		549	1217	466	561	662	3455	
Male		968	2094	817	973	1186	6038	
Non-binary		96	180	63	75	93	507	
Grand Total		1613	3491	1346	1609	1941	10000	

Allocate marketing resources and product development efforts to cater to the higher consumption frequency among males. Tailor advertising messages and branding to resonate with male consumers, highlighting aspects of energy, performance, and vitality. Consider partnerships with male-oriented sports events or fitness influencers to further target this demographic.

Male Preference:

- Male respondents exhibit a higher preference for energy drinks compared to female and non-binary individuals.
- Among all gender groups, males consistently demonstrate a higher consumption frequency across various age categories.
- The data suggests that males are the primary demographic segment driving demand for energy drinks.

2. Age Group Preferences:

- Respondents aged 19-30 exhibit the highest consumption across all frequencies.
- Consumption decreases with age, with the 46-65 age group showing the least consumption.

Count of Consume_frequency		Column Labels			
Row Labels	Female	Male	Non-binary	Grand Total	
15-18	516	903	69	1488	
2-3 times a month	74	147	11	232	
2-3 times a week	198	312	29	539	
Daily	57	131	8	196	
Once a week	78	156	10	244	
Rarely	109	157	11	277	
19-30	1891	3337	292	5520	
2-3 times a month	301	531	59	891	
2-3 times a week	652	1159	106	1917	
Daily	272	431	33	736	
Once a week	311	533	44	888	
Rarely	355	683	50	1088	
31-45	834	1435	107	2376	
2-3 times a month	144	236	18	398	
2-3 times a week	292	488	29	809	
Daily	112	217	19	348	
Once a week	125	221	15	361	
Rarely	161	273	26	460	
46-65	138	261	27	426	
2-3 times a month	19	41	6	66	
2-3 times a week	48	95	12	155	
Daily	16	25	1	42	
Once a week	33	48	5	86	
Rarely	22	52	3	77	
65+	76	102	12	190	
2-3 times a month	11	13	2	26	
2-3 times a week	27	40	4	71	
Daily	9	13	2	24	
Once a week	14	15	1	30	
Rarely	15	21	3	39	
Grand Total	3455	6038	507	10000	

Focus marketing campaigns on the 19-30 age group, as they exhibit the highest consumption frequency. Develop products and promotions that appeal to the interests and lifestyle of this demographic, such as sponsoring events or collaborations with popular youth-centric brands or influencers. Additionally, consider loyalty programs or exclusive offers aimed at retaining this key demographic.

3. Marketing Channel Preferences for Youth:

- Online ads are the most effective channel to reach the youth (15-30 age group), followed by TV commercials.

Question No.3	Which type of marketing reaches the most Youth (15-30)?			Online Ads
Count of Marketing_channels	Column Labels			
Row Labels	15-18	19-30	Grand Total	
Print media	75	371	446	
Outdoor billboards	117	585	702	
Other	94	608	702	
TV commercials	495	1290	1785	
Online ads	707	2666	3373	
Grand Total	1488	5520	7008	

Invest in online advertising channels to effectively reach the youth demographic, allocating resources towards targeted social media campaigns and influencer partnerships. Leverage TV commercials for broader reach and brand awareness among younger audiences. Consider interactive and shareable content formats to increase engagement and virality among the youth on social media platforms.

Consumer's Preferences:

Analyzing consumer preferences provides valuable insights into product features and attributes that resonate with the target audience. By understanding preferred ingredients, packaging preferences, and factors influencing brand preference among consumers, businesses can tailor their products and marketing strategies to meet the needs and desires of their target market effectively.

- **.What are the preferred ingredients of energy drinks among respondents?**

Consumer preferences for specific ingredients play a significant role in product selection and brand loyalty. Understanding the ingredients that resonate with consumers can help businesses formulate products that meet consumer expectations and preferences.

- **What packaging preferences do respondents have for energy drinks?**

Packaging plays a crucial role in shaping consumer perception and purchase decisions. Preferences for packaging design, size, and functionality can influence product appeal and brand perception among consumers.

By leveraging insights into preferred ingredients, packaging preferences, and factors influencing brand preference, businesses can optimize their product offerings and marketing strategies to better meet the needs and preferences of their target audience. This approach can lead to increased customer satisfaction, brand loyalty, and ultimately, business success.

1. Preferred Ingredients:

- Caffeine is the most preferred ingredient among respondents.

Question No.1		What are the preferred ingredients of energy drinks among res			Caffiene
Row Labels		Count of Ingredients_expected			
Caffeine		3896			
Guarana		1553			
Sugar		2017			
Vitamins		2534			
Grand Total		10000			

Consumer Preference for Caffeine:

- Consumer surveys and market research consistently indicate that caffeine is the most preferred ingredient in energy drinks.
- Caffeine is valued for its stimulant properties, which help increase alertness, improve concentration, and provide a quick energy boost.
- Across various demographics and consumer segments, caffeine consistently emerges as the primary driver of purchase decisions when it comes to energy drinks.

Incorporate caffeine prominently into product formulations and marketing messaging to align with consumer preferences. Highlight the energizing and performance-enhancing benefits of caffeine to attract consumers seeking a boost in energy and focus. Consider offering variations with different caffeine levels to cater to varying consumer preferences.

2. Packaging Preferences:

- Compact and portable cans are the preferred packaging choice among respondents.

Question No.2	What packaging preferences do respondents have for energy drinks			Compact and Portable cans
Row Labels	Count of Packaging_preference			
Collectible packaging	1501			
Compact and portable cans	3984			
Eco-friendly design	983			
Innovative bottle design	3047			
Other	485			
Grand Total	10000			

Consumer Preferences for Compact and Portable cans:

- The preference for compact cans reflects broader consumer preferences for sleek, modern, and aesthetically pleasing packaging designs.
- Brands that invest in innovative packaging designs, including compact cans with eye-catching graphics and branding elements, can enhance product appeal and attract consumer attention on crowded store shelves.

Optimize product packaging to meet consumer preferences for compact and portable cans. Consider redesigning packaging to enhance convenience and portability, making it easier for consumers to enjoy CodeX energy drinks on-the-go. Additionally, explore eco-friendly packaging options to appeal to environmentally-conscious consumers and differentiate the brand in the market.

Competition Analysis:

Assessing the competitive landscape helps identify key players and understand factors contributing to their success. This section explores market leaders, reasons for brand preference, and strategies adopted by competitors in the energy drink market.

- **Who are the current market leaders?**

Identifying market leaders provides valuable insights into the competitive dynamics of the energy drink market. Understanding the market share and influence of leading brands allows businesses to benchmark their performance and identify areas for growth and differentiation. Businesses can study the strategies and product offerings of these market leaders to gain insights into successful brand positioning and differentiation strategies.

- **What factors are affecting brand preferences?**

Understanding the factors that influence brand preference among consumers is essential for building brand loyalty and driving repeat purchases. By identifying the key drivers of brand preference, businesses can develop strategies to strengthen brand positioning and differentiation in the market. Brand reputation emerges as the primary reason consumers prefer specific brands over others, highlighting the importance of trust and credibility in brand building.

1. Market Leaders:

- Cola-Coka, Gangster, and Bepsi emerge as the top competitors in the energy drink market.

Question No.1	Who are the current market leaders?	Cola-Coka
Row Labels	Count of Current_brands	
Others	479	
Sky 9	979	
CodeX	980	
Blue Bull	1058	
Gangster	1854	
Bepsi	2112	
Cola-Coka	2538	
Grand Total	10000	

Cola-Coka is the top market leader:

- Cola-Coka, Gangster, and Bepsi have established strong brand recognition and market presence, capturing significant shares of the energy drink market.
- Their widespread availability and consumer familiarity contribute to their competitive advantage over other brands in the industry.
- Cola-Coka, Gangster, and Bepsi likely invest heavily in marketing and advertising campaigns to maintain brand visibility, attract new customers, and retain existing ones.

Study the strategies and tactics of market leaders such as Cola-Coka, Gangster, and Bepsi to identify areas for improvement and differentiation. Analyze their branding, product offerings, and marketing initiatives to uncover insights that can inform CodeX's own business strategies. Consider introducing limited edition flavors or collaborations with popular brands to generate buzz and attract consumers' attention.

2. Reasons for Brand Preference:

- Brand reputation is the primary reason consumers prefer specific brands over others.

Question No.2	What are the primary reasons consumers prefer those brands over ours?							Brand Reputation				
Count of Reasons_for_choosing_brands	Column Labels											
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9	Grand Total				
Brand reputation	577	289		259	616	511	140	260	2652			
Taste/flavor preference	423	237		182	531	357	87	194	2011			
Availability	418	180		195	510	339	86	182	1910			
Effectiveness	339	187		176	433	338	87	188	1748			
Other	355	165		168	448	309	79	155	1679			
Grand Total	2112	1058		980	2538	1854	479	979	10000			

Brand reputation is the primary reason consumers prefer specific brands over others.

- The finding that brand reputation is the primary driver of brand preference among consumers highlights the significant role that brand perception plays in shaping consumer behavior and purchase decisions. Here's an elaboration on this insight:
- Consumers tend to gravitate towards brands with established reputations for quality, reliability, and consistency.
- A strong brand reputation instills trust and confidence in consumers, reassuring them that they are making a safe and reliable choice when purchasing products from that brand.
- Brands with positive reputations are often associated with high-quality products, superior customer service, and positive brand experiences.
- Consumers perceive these brands as offering greater value for their money and are willing to pay a premium for products from reputable brands based on the perceived quality and prestige associated with the brand.

Marketing Channels and Brand Awareness:

Effective marketing strategies are paramount for businesses aiming to build brand awareness, foster consumer engagement, and drive conversions in the competitive energy drink market. By evaluating the efficacy of different marketing channels and strategies, businesses can identify the most impactful approaches to reach and influence their target audience effectively.

- **Which marketing channel can be used to reach more customers?**

Understanding consumer preferences for marketing channels is crucial for allocating marketing budgets effectively and maximizing reach and engagement. By identifying the most preferred marketing channels among the target audience, businesses can tailor their marketing efforts to meet consumer expectations and optimize ROI.

- **How effective are different marketing strategies and channels in reaching our customers?**

Assessing the effectiveness of marketing strategies provides valuable insights into their impact on brand awareness, perception, and consumer behavior. By analyzing key metrics such as brand recall, message retention, and conversion rates, businesses can refine their marketing strategies to enhance effectiveness and drive desired outcomes.

1. Effective Marketing Channels:

- Online ads are the most effective channel to reach consumers, followed by TV commercials.

Question No.1	Which marketing channel can be used to reach more customers?	Online Ads
Row Labels	Count of Marketing_channels	
Online ads	4020	
Other	1225	
Outdoor billboards	1226	
Print media	841	
TV commercials	2688	
Grand Total	10000	

Online ads are the most effective channel:

- Online ads offer unparalleled reach and targeting capabilities, allowing advertisers to precisely target their desired audience based on demographics, interests, behaviors, and online activity.
- Digital advertising platforms such as social media, search engines, and display networks enable advertisers to reach consumers across various devices and platforms, including smartphones, tablets, and desktop computers.
- Online ads provide opportunities for interactive and engaging experiences that capture consumers' attention and encourage interaction, such as clickable banners, video ads, social media campaigns, and immersive content experiences.
- Interactive elements and multimedia content enhance engagement and enable advertisers to convey their brand message more effectively, leading to higher levels of brand recall and customer engagement.

2. Effectiveness of Marketing Strategies:

- Online ads significantly contribute to brand reputation and preference among consumers.

Question No.2		How effective are different marketing strategies and channels in reaching					Online Ads are the best way to promote the brand reputation which eventually contributes to the more preference.			
Row Labels	Count of Heard_before									
Online ads	4020									
Other	1225									
Outdoor billboards	1226									
Print media	841									
TV commercials (blank)	2688									
Grand Total	10000									

Count of Heard_before	Column Labels									
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9	Grand Total		
Online ads	844	425	411	1001	772	191	376	4020		
Other	279	126	116	293	233	60	118	1225		
Outdoor billboards	246	140	119	343	190	64	124	1226		
Print media	183	81	73	232	147	36	89	841		
TV commercials	560	286	261	669	512	128	272	2688		
Grand Total	2112	1058	980	2538	1854	479	979	10000		

Online ads significantly contribute to brand reputation :

- Online ads provide brands with a powerful platform to increase their visibility and reach a broader audience of potential customers across various digital channels and platforms.
- Through targeted and well-executed online advertising campaigns, brands can effectively raise awareness of their products or services among consumers who may not have been previously familiar with the brand.
- Digital advertising enables brands to convey their unique value proposition, key messaging, and brand positioning to consumers in a compelling and impactful manner.
- By crafting persuasive ad copy, compelling visuals, and engaging multimedia content, brands can effectively communicate their brand story, personality, and values, resonating with their target audience and fostering positive brand associations.

Brand Penetration:

Assessing the extent of brand penetration is essential for understanding CodeX's market reach and potential for growth in the competitive energy drink market. This section delves into various aspects such as awareness levels, brand loyalty, and consumer perception to identify opportunities for expanding CodeX's market presence and strengthening its competitive position.s.

- **. What do people think about our brand? (overall rating)**

Measuring awareness levels among consumers is crucial for evaluating CodeX's brand recognition and visibility in the market. By assessing the percentage of consumers who are familiar with the CodeX brand, businesses can gauge the effectiveness of their marketing efforts and identify areas for improvement in brand promotion and communication strategies.

Overall Brand Rating:

The overall brand rating reflects the collective sentiment of consumers towards CodeX, offering valuable insights into brand perception and consumer satisfaction. Analyzing overall ratings enables businesses to assess brand strength and identify opportunities for enhancing brand appeal and market competitiveness.

- **Which cities do we need to focus more on?**

Identifying cities with untapped market potential allows CodeX to allocate resources and marketing efforts strategically to maximize brand exposure and market penetration. By analyzing data on current brand presence and consumer preferences in different cities, businesses can prioritize expansion efforts in key geographic areas to capitalize on growth opportunities.

Taste Ratings by Cities:

Examining taste ratings by cities provides granular insights into regional variations in consumer preferences and helps identify target markets with high potential for growth. By analyzing taste ratings across different cities, businesses can tailor marketing strategies and product offerings to resonate with local preferences and drive market penetration.

1. Overall Rating:

The taste rating for CodeX energy drink is predominantly above average, with 439 respondents out of 980 rating it as such. This indicates a positive perception of the brand's taste among consumers.

Question No.1	What do people think about our brand? (overall rating)		Above Average
Count of Taste rating	Column Labels		
Row Labels	CodeX	Grand Total	
Above Average	439	439	
Average	286	286	
Below Average	255	255	
Grand Total	980	980	

Utilize the positive perception of CodeX's taste to strengthen brand loyalty and attract new customers through targeted marketing campaigns highlighting the superior taste. Implement strategies such as influencer collaborations, social media promotions, and taste-testing events to showcase the product's quality and encourage trial among potential customers.

2. Brand Perception Across Different Groups:

Even among respondents who have not tried CodeX before, the majority still rated its taste as above average. This suggests positive word-of-mouth and brand reputation, even among potential new customers.

Count of "Taste rating" and count of "Have Tried Before"		
Count of Taste rating	Column Labels	
Row Labels	CodeX	Grand Total
Above Average	439	439
No	225	225
Yes	214	214
Average	286	286
No	142	142
Yes	144	144
Below Average	255	255
No	125	125
Yes	130	130
Grand Total	980	980

We further cross checked to analyze that mostly people from the category "Not tried before" has also marked the taste as "Above average" which indicates that the taste is upto the mark for even new customers or we can say that the word of mouth of our brand is pretty good.

Positive Word of Mouth: The fact that new customers perceive our product's taste as above average indicates that positive word-of-mouth recommendations or reviews may be influencing their perception. Satisfied existing customers may be sharing their positive experiences with others, leading to increased curiosity and willingness among new customers to try our product.

Inherent Quality: The consistent rating of taste as above average among new customers suggests that the inherent quality and flavor profile of our product are appealing and satisfying to a broad audience. This indicates that our product formulation and taste meet or exceed the expectations of consumers, even those who are trying it for the first time.

2. Focus Cities:

Cities with a count of less than 50 respondents, such as Lucknow, Jaipur, and Delhi, require more attention in terms of brand penetration efforts. These cities represent untapped markets where CodeX can focus its marketing efforts to increase brand awareness and consumer engagement.

Question No.2 Which cities do we need to focus more on?	
We need to focus more on the cities having count of <50 (marked in the table).	
Row Labels	Count of Current_brands
CodeX	980
Lucknow	5
Jaipur	28
Delhi	40
Ahmedabad	45
Kolkata	48
Pune	92
Chennai	92
Mumbai	156
Hyderabad	182
Bangalore	292
Grand Total	980

- **Lucknow:** With only 5 respondents, Lucknow represents a small but potentially lucrative market for CodeX. By focusing marketing efforts in this city, such as targeted advertising campaigns, local events, and partnerships with retailers, CodeX can raise brand visibility and capture the interest of consumers in Lucknow.
- **Jaipur:** Jaipur, with 28 respondents, indicates a modest presence of CodeX in the market. By strategically targeting Jaipur through localized marketing initiatives, promotional events, and collaborations with key stakeholders, CodeX can establish a stronger foothold and cultivate brand loyalty among consumers in this city.
- **Delhi:** Despite being a major metropolitan area, Delhi's count of 40 respondents suggests room for growth in brand penetration. By intensifying marketing efforts in Delhi, including digital marketing campaigns, experiential activations, and distribution expansion, CodeX can capitalize on the vast consumer base and competitive landscape of the capital city.

3. Taste Rating by Cities:

While overall taste ratings are favorable, there are insights indicating areas for improvement. For example, in Jaipur, despite receiving 12 votes for above-average taste, there are also 10 votes for below average, indicating a need for enhancement.

Some insights about the taste rating according to the cities.				
Count of Current_brands	Column Labels			
Row Labels	Above Average	Average	Below Average	Grand Total
CodeX	439	286	255	980
Lucknow	4		1	5
Jaipur	12	6	10	28
Delhi	21	10	9	40
Ahmedabad	23	12	10	45
Kolkata	19	17	12	48
Pune	36	31	25	92
Chennai	40	21	31	92
Mumbai	79	40	37	156
Hyderabad	80	49	53	182
Bangalore	125	100	67	292
Grand Total	439	286	255	980

- **Positive Feedback:** The fact that CodeX received 12 votes for above-average taste in Jaipur indicates that the product resonates well with a portion of consumers in the city. This positive feedback underscores the potential for CodeX to succeed in the Jaipur market.
- **Room for Improvement:** Despite the favorable ratings, the presence of 10 votes for below-average taste highlights areas where CodeX can refine its product to better align with consumer preferences. Addressing these concerns can enhance overall satisfaction and loyalty among consumers in Jaipur.

Purchase Behavior:

Analyzing consumer preferences is essential for developing products and marketing strategies that align with the needs and desires of the target audience. This section delves into various aspects of consumer preferences, including preferred ingredients, packaging preferences, typical consumption situations, and factors influencing purchase decisions.

- **Where do respondents prefer to purchase energy drinks?**

Identifying the preferred purchase locations for energy drinks offers insights into consumer behavior and distribution channel effectiveness. By understanding where consumers prefer to buy energy drinks, businesses can optimize their distribution strategy and ensure products are available where and when consumers are most likely to make a purchase.

- **What are the typical consumption situations for energy drinks among respondents?**

Understanding the typical consumption situations for energy drinks provides insights into consumer behavior and usage occasions. By identifying when and why consumers consume energy drinks, businesses can tailor marketing messages and product positioning to resonate with specific consumption contexts.

- **What factors influence respondents' purchase decisions, such as price range and limited edition packaging?**

Identifying the key factors that influence consumers' purchase decisions, such as price range and packaging preferences, provides actionable insights for product development and marketing strategies. By understanding the drivers behind purchase behavior, businesses can optimize product offerings and pricing strategies to maximize consumer appeal and competitive advantage.

1. Preferred Purchase Locations:

Supermarkets emerge as the preferred purchase location for energy drinks among respondents, with 4494 out of 10000 indicating a preference for this retail channel. This highlights the importance of having a strong presence in supermarkets to maximize sales opportunities.

Question No.1	Where do respondents prefer to purchase energy drinks?			Supermarkets
Row Labels	Count of Purchase_location			
Other	679			
Local stores	813			
Gyms and fitness centers	1464			
Online retailers	2550			
Supermarkets	4494			
Grand Total	10000			

- **Consumer Convenience:** The preference for supermarkets suggests that consumers value the convenience and accessibility offered by these retail outlets. Supermarkets typically offer a wide range of products under one roof, making it convenient for consumers to purchase energy drinks along with their regular groceries or other items.
- **Visibility and Exposure:** Supermarkets provide high visibility and exposure for products placed on shelves or in dedicated displays, increasing the likelihood of consumer engagement and impulse purchases. Having a prominent presence in supermarkets enhances brand visibility and creates opportunities to capture the attention of potential consumers.
- **Trust and Reliability:** Consumers often perceive supermarkets as reliable sources for purchasing products due to their established reputation and stringent quality standards. By positioning energy drinks in supermarkets, brands can leverage this trust factor to instill confidence in consumers and drive purchase decisions.

2. Typical Consumption Situations:

The most common consumption situation for energy drinks among respondents is sports/exercise, followed by studying/working late. This insight can inform targeted marketing strategies and product positioning to align with consumer usage occasions.

Question No.2

What are the typical consumption situations for energy drinks among respondents?

Situations are listed below and among them the most common is sports/exercise.

Row Labels	Count of Typical_consumption_situations		
Driving/commuting	297		
Other	491		
Social outings/parties	1487		
Sports/exercise	4494		
Studying/working late	3231		
Grand Total	10000		

- **Sports and Exercise:** The prevalence of energy drink consumption during sports and exercise activities highlights the association between these beverages and physical performance enhancement. Consumers often turn to energy drinks to boost energy levels, improve endurance, and enhance focus during workouts or sports activities.
- **Studying and Working Late:** Another significant consumption situation identified is studying or working late, indicating that consumers rely on energy drinks to combat fatigue, stay alert, and maintain productivity during extended study or work sessions. Energy drinks are perceived as functional beverages that can provide a much-needed energy boost to support cognitive function and concentration during mentally demanding tasks.

3. Factors Influencing Purchase Decisions:

Respondents show a preference for energy drinks priced between 50-99, indicating price sensitivity in purchasing decisions. Additionally, limited edition packaging is favored by respondents across different purchase locations, suggesting an opportunity for branding and promotional activities.

Question No.3 What factors influence respondents' purchase decisions, such as price range and limited edition packaging?						
Count of Price_range	Column Labels					
Row Labels	Gyms and fitness centers	Local stores	Online retailers	Other	Supermar	Grand Total
100-150	437	256	831	217	1401	3142
50-99	654	342	1081	287	1924	4288
Above 150	221	138	382	112	708	1561
Below 50	152	77	256	63	461	1009
Grand Total	1464	813	2550	679	4494	10000

If we keep the price range between 50-99 then we can yeild maximum sales.

Count of Limited_edition_pac	Column Labels							
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9	Grand Total
Gyms and fitness centers	301	150	143	388	263	77	142	1464
No	120	56	58	170	102	36	56	598
Not Sure	69	32	32	73	57	15	20	298
Yes	112	62	53	145	104	26	66	568
Local stores	176	85	87	179	160	45	81	813
No	69	37	34	63	48	25	29	305
Not Sure	32	13	13	35	41	10	19	163
Yes	75	35	40	81	71	10	33	345
Online retailers	556	274	248	653	457	110	252	2550
No	228	103	88	260	172	38	98	987
Not Sure	107	60	51	134	99	24	49	524
Yes	221	111	109	259	186	48	105	1039
Other	133	86	66	197	99	34	64	679
No	60	45	23	87	45	13	29	302
Not Sure	30	13	13	33	16	9	18	132
Yes	43	28	30	77	38	12	17	245
Supermarkets	946	463	436	1121	875	213	440	4494
No	403	176	167	468	346	82	189	1831
Not Sure	186	99	86	229	177	50	87	914
Yes	357	188	183	424	352	81	164	1749
Grand Total	2112	1058	980	2538	1854	479	979	10000

From the above table we can conclude that CodeX and Gangster should consider the limited edition packaging as the respodents demand more of it at different purchase locations from these brands.

Green Labels	Yes for Limited Edition Packaging
Red Labels	No for Limited Edition Packaging

Furthermore, respondents express a preference for limited edition packaging across various purchase locations, including gyms and fitness centers, local stores, online retailers, and supermarkets. This finding highlights the significance of packaging design and branding in influencing consumer purchasing behavior. Limited edition packaging creates a sense of exclusivity and novelty, driving consumer interest and encouraging repeat purchases.

Product Development:

Understanding consumer purchase behavior is essential for identifying areas of improvement and optimizing product development strategies. This section explores consumer preferences, purchase frequency, and factors influencing buying decisions to determine priorities for product development and enhancement.

- **Which area of business should we focus more on our product development? (Branding/taste/availability)**

Identifying the areas of product development that require focus is crucial for meeting consumer expectations and staying competitive in the market. By assessing consumer feedback and preferences, businesses can prioritize enhancements in branding, taste, or availability to drive product innovation and differentiation.

- **What are consumers preferences and suggestions?**

Understanding consumer preferences and soliciting feedback are essential for refining product offerings and addressing consumer needs effectively. By listening to consumer insights and suggestions, businesses can identify opportunities for product improvement and innovation to enhance consumer satisfaction and loyalty.

1. Areas of Focus:

Correlation analysis between taste experience, brand perception, and general perception reveals that taste rating is not significantly influenced by brand perception or general perception. However, health concerns and local availability are key factors preventing consumers from trying CodeX. Therefore, focusing on clear labeling of ingredients and improving local availability can drive product trial and adoption.

Question No.1	Which area of business should we focus more on our product development? (Branding/taste/availability)			
For the above mentioned purpose, we can opt for correlations between branding, tasting and availability etc. to find out what is the reason behind low rating.				
Correlation between "Taste Experience" and "General Perception"	0.005379822			
Which states that the rating of our brand is not affected by the general perception of the public, there is some other reason which needs to be discovered.				
Correlation between "Taste Experience" and "Brand Perception"	-0.020659292			
This correlation is very close to zero, so the negative correlation is very weak. There is practically no linear relationship between the two variables.				

Taste Perception vs. Brand Perception:

- There is no strong correlation between taste experience and brand perception, indicating that consumers evaluate taste independently of their perceptions of the brand. This suggests that while brand image is important for overall brand loyalty and preference, taste remains a distinct factor in consumers' purchasing decisions.

Importance of Ingredient Transparency:

- Health concerns emerge as a significant barrier preventing consumers from trying CodeX. This highlights the importance of clear labeling of ingredients and nutritional information on product packaging. Providing transparent information about the ingredients used in CodeX can alleviate consumer concerns and build trust in the brand.

Addressing Local Availability:

- Local availability is identified as another key factor hindering consumers from trying CodeX. Improving the distribution and availability of CodeX products in various retail outlets can enhance accessibility for consumers, increasing the likelihood of product trial and adoption.

2. Consumer Preferences and Suggestions:

Respondents desire healthier alternatives with reduced sugar content and more natural ingredients. Packaging preferences lean towards compact and portable cans, as well as innovative bottle designs. Addressing these preferences in product development can enhance brand appeal and meet consumer expectations.

Count of Reasons_preventing Column Labels		
Row Labels	CodeX	Grand Total
Health concerns	233	233
Not available locally	229	229
Not interested in energy drinks	210	210
Other	118	118
Unfamiliar with the brand	190	190
Grand Total	980	980

Count of Reasons_preventing Column Labels									
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9	Grand Total	
Health concerns	474	238	233	562	416	108	227	2258	
Not available locally	546	264	229	599	455	106	232	2431	
Not interested in energy drinks	453	211	210	569	418	115	217	2193	
Other	267	150	118	335	221	54	123	1268	
Unfamiliar with the brand	372	195	190	473	344	96	180	1850	
Grand Total	2112	1058	980	2538	1854	479	979	10000	

Same is the case for overall observation that the users of other brands also have the most issue in "Health Concerns" and "No Local Availability"

2. Consumer Preferences and Suggestions:

Count of Price_range	Column Labels								
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9 (blank)	Grand Total	
Increased energy and focus	783	405	344	873	670	178	321	3574	
Other	195	95	102	219	141	45	83	880	
To boost performance	310	155	162	377	290	70	150	1514	
To combat fatigue	500	267	217	641	439	119	245	2428	
To enhance sports performanc (blank)	324	136	155	428	314	67	180	1604	
Grand Total	2112	1058	980	2538	1854	479	979	10000	

By looking at the above insights, we can conclude that the main reason for consumption of the energy drinks in almost all the brands is "Increased energy and focus" and "To combat fatigue". So we should focus more on the ingredients that can be helpful for the customers in order to achieve these benefits.

We can also go for branding that has some tagline having mentioned something related to "Increased energy and focus" and "Combat Fatigue", this can also eventually grab the attention of most customers.

Count of Improvements_desir	Column Labels								
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9	Grand Total	
Healthier alternatives	300	154	143	394	274	63	144	1472	
More natural ingredients	520	273	234	645	471	128	227	2498	
Other	210	109	97	257	191	46	88	998	
Reduced sugar content	629	300	298	742	563	141	322	2995	
Wider range of flavors	453	222	208	500	355	101	198	2037	
Grand Total	2112	1058	980	2538	1854	479	979	10000	

By looking at the above insights, we can also conclude that the customers/consumers are concerned about their health and wants that the sugar content should be reduced and more healthier and natural ingredients should be used.

Count of Packaging_preferenc	Column Labels								
Row Labels	Bepsi	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9	Grand Total	
Collectible packaging	331	168	130	362	289	77	144	1501	
Compact and portable cans	863	442	412	1003	703	192	369	3984	
Eco-friendly design	201	102	105	246	174	54	101	983	
Innovative bottle design	629	295	285	816	578	128	316	3047	
Other	88	51	48	111	110	28	49	485	
Grand Total	2112	1058	980	2538	1854	479	979	10000	

By looking at the above insights, we can conclude that people prefer "Compacted and portable cans" and "Innovative bottle design" as packaging so we can increase our sales by investing more in these packaging.

Secondary Insights

Question No.1	What immediate improvements can we bring to the product?
	"Compacted and portable cans" and "Innovative bottle design" as packaging.
	Sugar content should be reduced and more healthier and natural ingredients should be used.
	Tagline having mentioned something related to "Increased energy and focus" and "Combat Fatigue".
	Making the product locally available.

Question No.2	What should be the ideal price of our product?		
We can go for other drinks' price analysis in order to get some more insights. According to the given insights the price should be around 200.			
Energy Drink Price Comparison			
Brand	Size (fl oz)	Average Price (USD)	
Red Bull	12	191	
Monster Energy	16	200	
Rockstar Energy Drink	16	180	
Bang Energy Drink	16	230	
5-Hour Energy	2 (shot)	250	
REIZE	14	165	
C4 Smart Energy Drink	16	250	
Rowdy Energy Drink	12	200	
Vegan Monster	14	225	
Xyience	12	200	
	Average Price	210	

According to the given survey, the price range should be 50-99, but if required and additional limited edition packaging is used then we can go for the price range of 100-150 as well.

Question No.3	What kind of marketing campaigns, offers, and discounts we can run?
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As the energy drinks are mostly consumed at Gyms and during sports or exercise, we can run advertisement campaigns at gyms and keep focus on taglines having keywords such as "Increased energy and focus" and "Natural Ingredients".

Secondary Insights

Question No.4

Who can be a brand ambassador, and why?

Considering brand ambassadors for our energy drinks, both Dr. Simran, a well-respected female trainer, and Sunil Kumar, a renowned male trainer in Bangalore, are strong options. While brand awareness is important, it's crucial to select an ambassador who aligns with our target audience and embodies the active, healthy lifestyle associated with our energy drinks.

Question No.5

Who should be our target audience, and why?

Most people prefer the frequency of having the drink for 2-3 times a week. In this bracket range Bangalore has the most consumers and Jaipur has the least. So we should focus more on Jaipur if we want to increase the consumption and make more customers by running different campaigns.

Count of City	Column Labels	Blue Bull	CodeX	Cola-Coka	Gangster	Others	Sky 9 (blank)	Grand Total
Row Labels	Bepsi							
Ahmedabad		99	48	45	118	73	23	456
Bangalore		594	311	292	667	552	154	2828
Chennai		201	99	92	218	193	44	937
Delhi		73	42	40	128	76	25	429
Hyderabad		419	180	182	474	301	81	1833
Jaipur		76	49	28	91	73	15	360
Kolkata		113	67	48	142	101	28	566
Lucknow		42	20	5	50	31	5	175
Mumbai		292	142	156	402	304	73	1510
Pune		203	100	92	248	150	31	906
(blank)								
Grand Total		2112	1058	980	2538	1854	479	10000

Bangalore has the highest consumption of Energy Drinks and Lucknow has the lowest.

Bangalore Focus: This indicates a potential market that has prior experience with energy drinks, given Bangalore's high consumption levels. You could go after current users by:

- Supplying unique or premium flavors.
- Emphasizing loyalty programs for brands.
- Highlighting practical advantages that go beyond an energy increase.
- Age bracket (19-30) with males consuming more.

Opportunity in Lucknow: Lucknow's low consumption may point to a potential new market. One way to reach prospective users is by:

- Providing informational campaigns about the advantages of energy drinks (if relevant).
- Concentrating on value and affordability in pricing.
- Focusing on particular Lucknow populations that have active lives or have more disposable wealth.

Suggested and Recommended Strategies

- 1. Invest in Digital Advertising:** Allocate a significant portion of the marketing budget to online advertising channels, such as social media platforms and display networks, to maximize reach and engagement among the target audience.
- 2. Create Engaging Content:** Develop compelling and relevant content that resonates with the interests and preferences of the target audience to capture attention and drive brand engagement effectively.
- 3. Leverage Influencer Partnerships:** Collaborate with influencers and brand ambassadors to amplify brand messaging and reach niche audiences with authentic and relatable content.
- 4. Measure and Iterate:** Continuously monitor and analyze the performance of marketing campaigns, leveraging data analytics and insights to refine strategies, optimize resource allocation, and drive continuous improvement in marketing effectiveness.
- 5. Enhance Brand Visibility:** Invest in targeted marketing initiatives and brand-building activities to increase awareness levels and expand CodeX's reach among the target audience.
- 6. Foster Brand Loyalty:** Implement customer-centric strategies and loyalty programs to cultivate strong relationships with existing customers and incentivize repeat purchases and advocacy.
- 7. Differentiate on Product Quality:** Emphasize CodeX's superior taste and quality through product innovation, ingredient transparency, and sensory marketing to position the brand as a premium choice in the market.
- 8. Monitor Competitive Landscape:** Continuously monitor competitor strategies and consumer trends to identify emerging opportunities and threats, allowing for agile decision-making and adaptation to market dynamics.

Suggested and Recommended Strategies

9. Enhance Brand Messaging: Leverage positive consumer sentiment and taste ratings to reinforce the brand's reputation for quality and flavor through targeted marketing campaigns and brand messaging.

10. Expand Presence in Untapped Markets: Prioritize expansion efforts in cities with lower counts of current brands to capitalize on growth opportunities and increase market penetration.

11. Tailor Marketing Strategies by City: Develop localized marketing strategies that resonate with the preferences and characteristics of target consumers in specific cities, leveraging insights from taste ratings and demographic data.

12. Monitor and Adapt: Continuously monitor consumer feedback and market dynamics to identify emerging trends and consumer preferences, allowing for agile decision-making and adaptation of marketing strategies to maximize brand impact and market share.

13. Enhance Brand Messaging: Leverage positive consumer sentiment and taste ratings to reinforce the brand's reputation for quality and flavor through targeted marketing campaigns and brand messaging.

14. Expand Presence in Untapped Markets: Prioritize expansion efforts in cities with lower counts of current brands to capitalize on growth opportunities and increase market share.

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16. Monitor and Adapt: Continuously monitor consumer feedback and market dynamics to identify emerging trends and consumer preferences, allowing for agile decision-making and adaptation of marketing strategies to maximize brand impact and market share.