

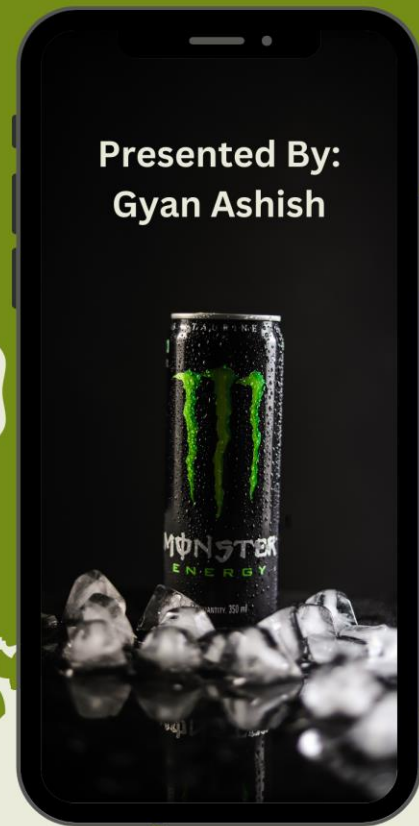


CodeX Customer Analysis - Energy Drink



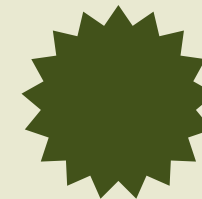
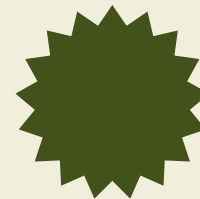
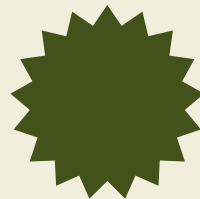
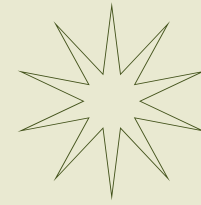
Created by Gyan Ashish

Tools :
MySQL
Power BI

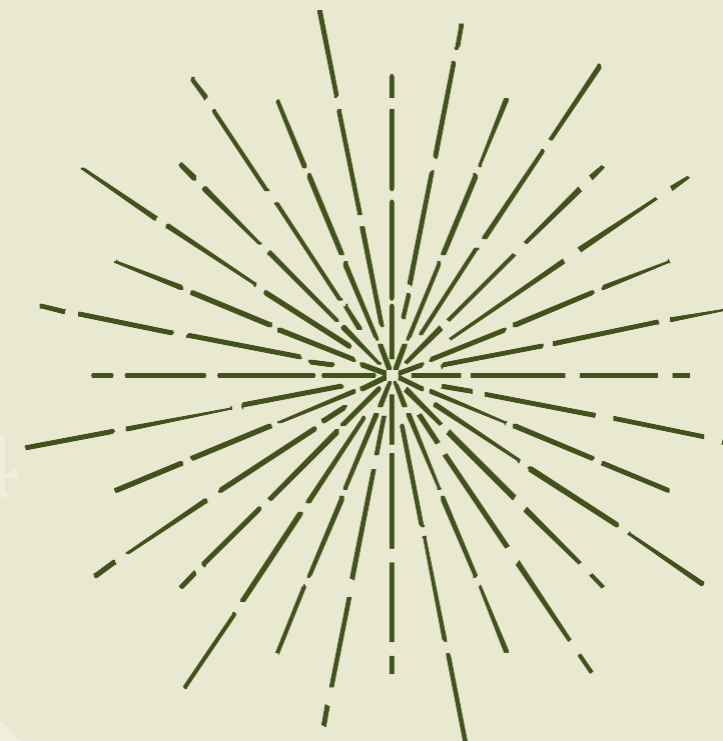


Customer
Analysis

CodeX Energy Drink



04



Thank you

✦ About Codex



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. Their Marketing team is responsible for increasing brand awareness, market share, and product development. They conducted a survey in those 10 cities and received results from 10k respondents. Peter Pandey, a marketing data analyst is tasked to convert these survey results to meaningful insights which the team can use to drive actions.



Objective



- The challenge is to translate this wealth of survey data into meaningful insights. Peter Pandey, the dedicated marketing data analyst, is tasked with distilling these results to provide actionable recommendations.
- The goal is to leverage these insights for increasing brand awareness, expanding market share, and refining product strategies.



Provide Insights to the Marketing Team in Food & Beverage Industry

Primary Insights (Sample Sections / Questions)

Note: These insights can be derived from the survey responses

1. Demographic Insights (examples)

- a. Who prefers energy drink more? (male/female/non-binary?)
- b. Which age group prefers energy drinks more?
- c. Which type of marketing reaches the most Youth (15-30)?

2. Consumer Preferences:

- a. What are the preferred ingredients of energy drinks among respondents?
- b. What packaging preferences do respondents have for energy drinks?

3. Competition Analysis:

- a. Who are the current market leaders?
- b. What are the primary reasons consumers preferring those brands over ours?

4. Marketing Channels and Brand Awareness:

- a. Which marketing channel can be used to reach more customers?
- b. How effective are different marketing strategies and channels in reaching our customers?

5. Brand Penetration:

- a. What do people think about our brand? (overall rating)
- b. Which cities do we need to focus more on?

6. Purchase Behavior:

- a. Where do respondents prefer to purchase energy drinks?
- b. What are the typical consumption situations for energy drinks among respondents?
- c. What factors influence respondents' purchase decisions, such as price range and limited-edition packaging?

7. Product Development

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

Secondary Insights (Sample Sections / Questions) Note: You need to do additional market research Recommendations for CodeX:

Give 5 recommendations for CodeX (below are some samples)

- What immediate improvements can we bring to the product?
- What would be the ideal price of our product?
- What kind of marketing campaigns, offers, and discounts can we run?
- Who can be a brand ambassador, and why?
- Who should be our target audience, and why?

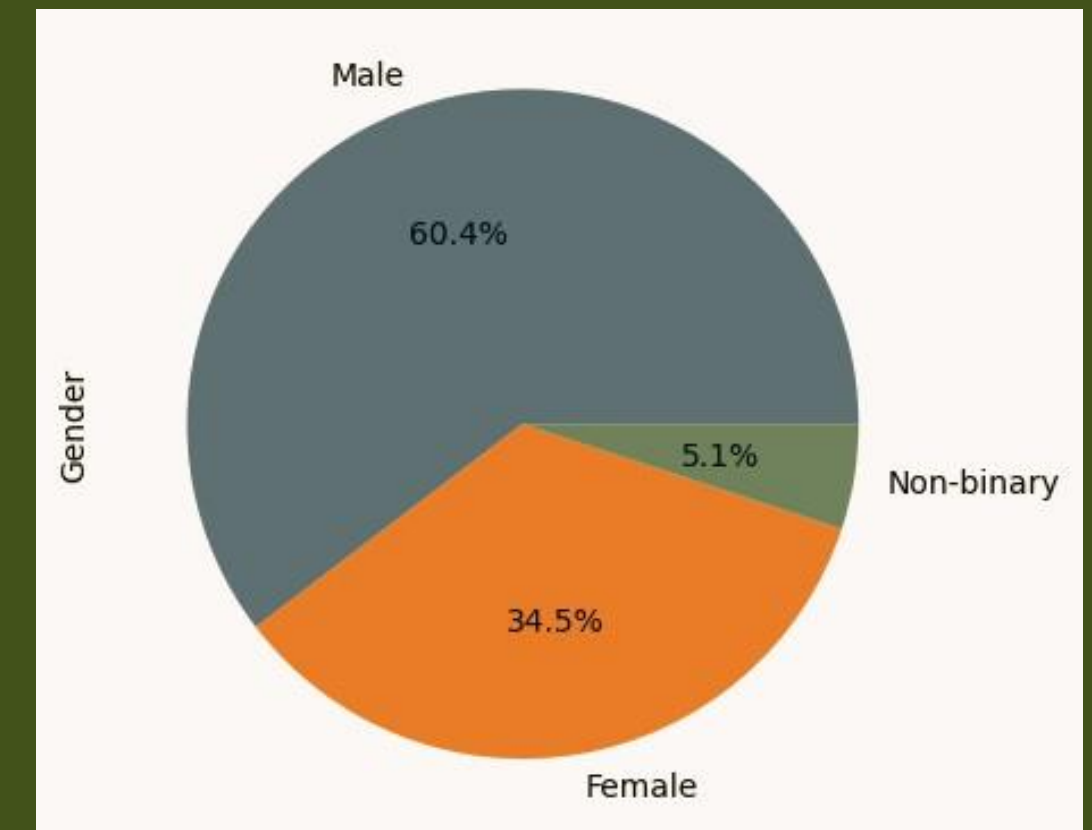


DeMographic Insights



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

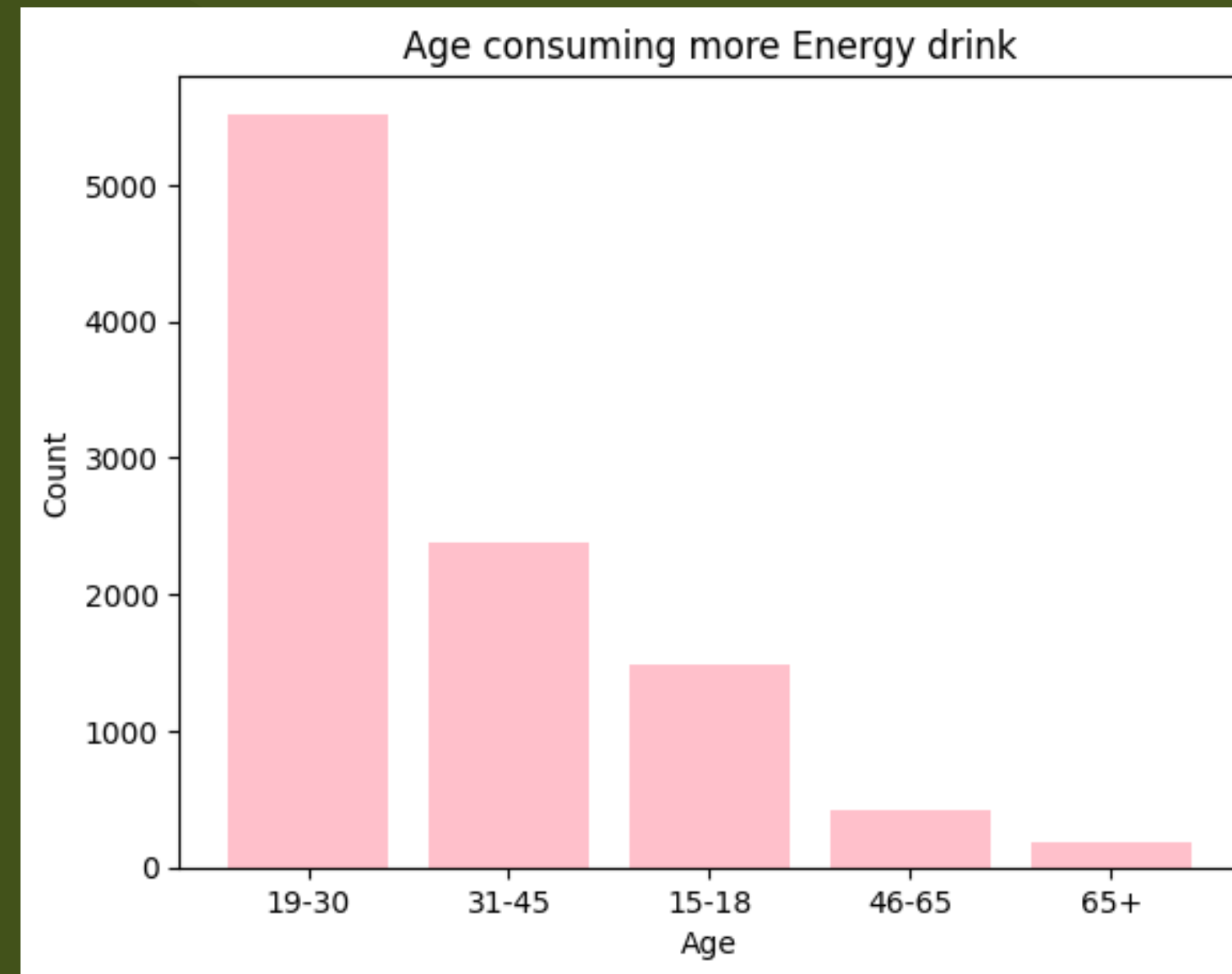
As we can see from the graph that 60% of the whole respondents who prefer energy drink more is male as compared to female (35%) and non-binary (5%).





2. Which age group prefers energy drinks more?

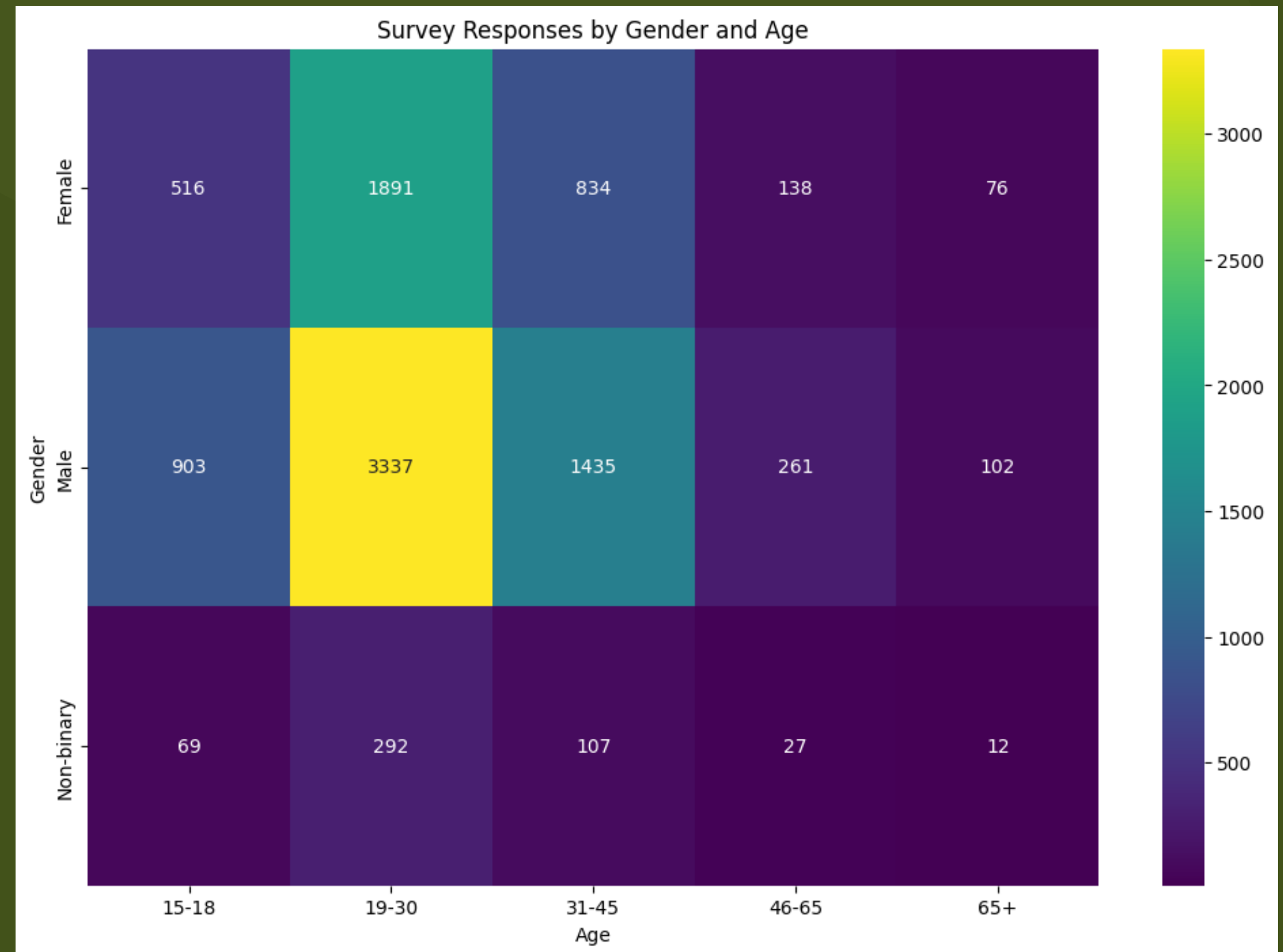
The Age Group that prefers Energy drink more is 19-30(5520) and next to it 31-45(2276).





This represents Age and gender heatmap how Age and Gender are co-related.

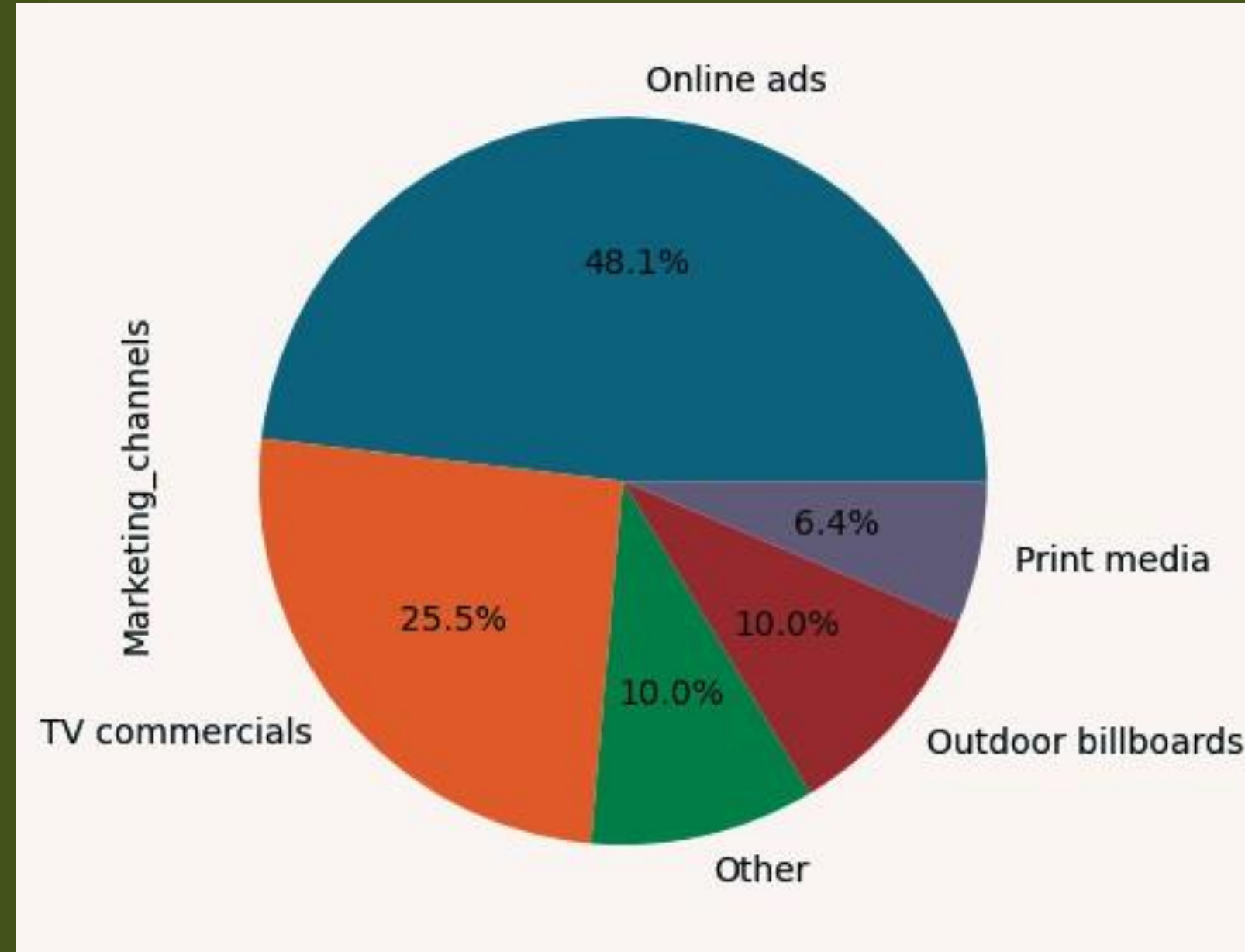
This graph shows Male with the age between (19-30) are mostly consuming energy drinks. and then male with age (31-45) are next.





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

Online ads are the marketing which reaches most youth with 49% of value.

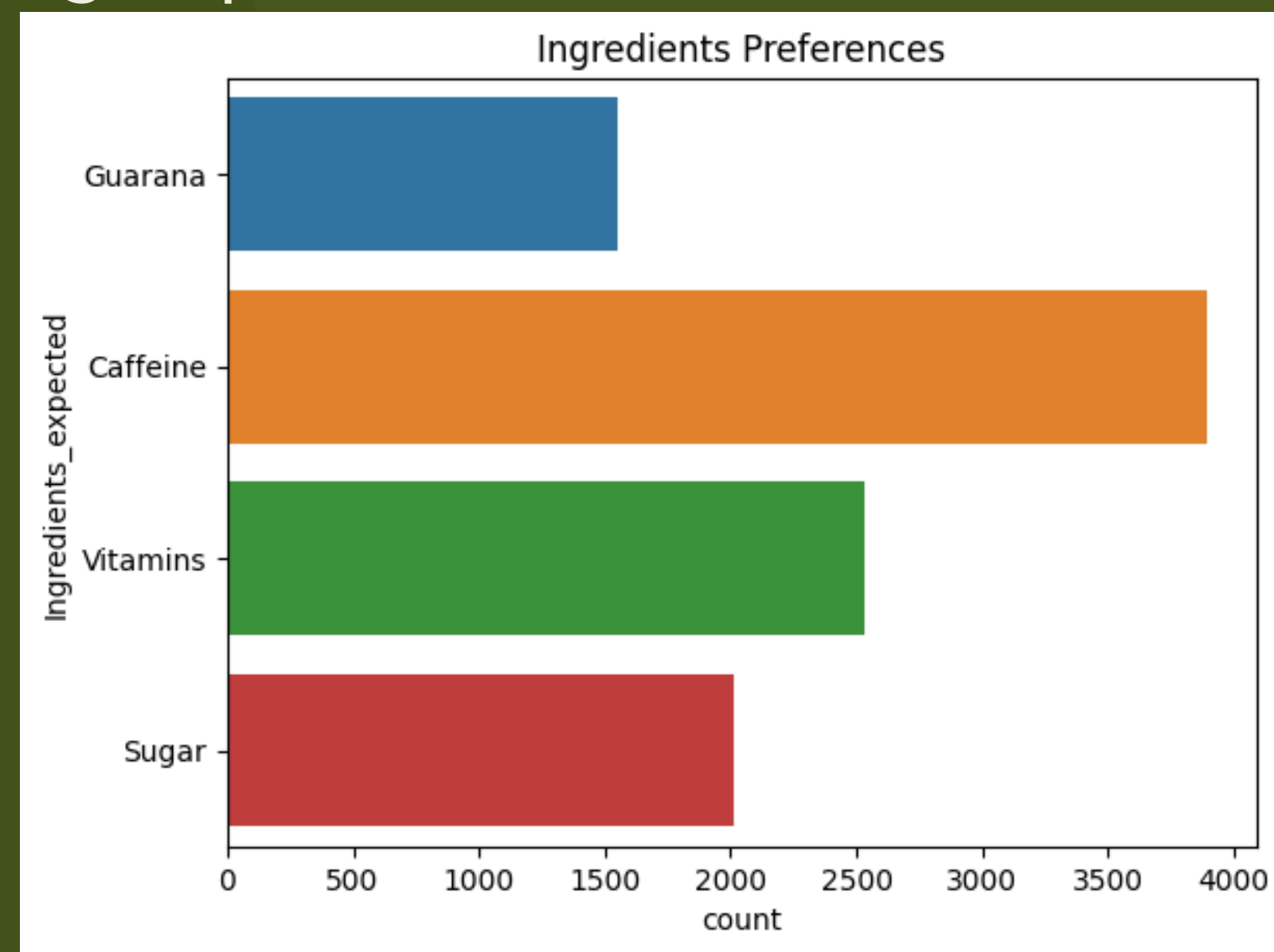




Consumer Preferences

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

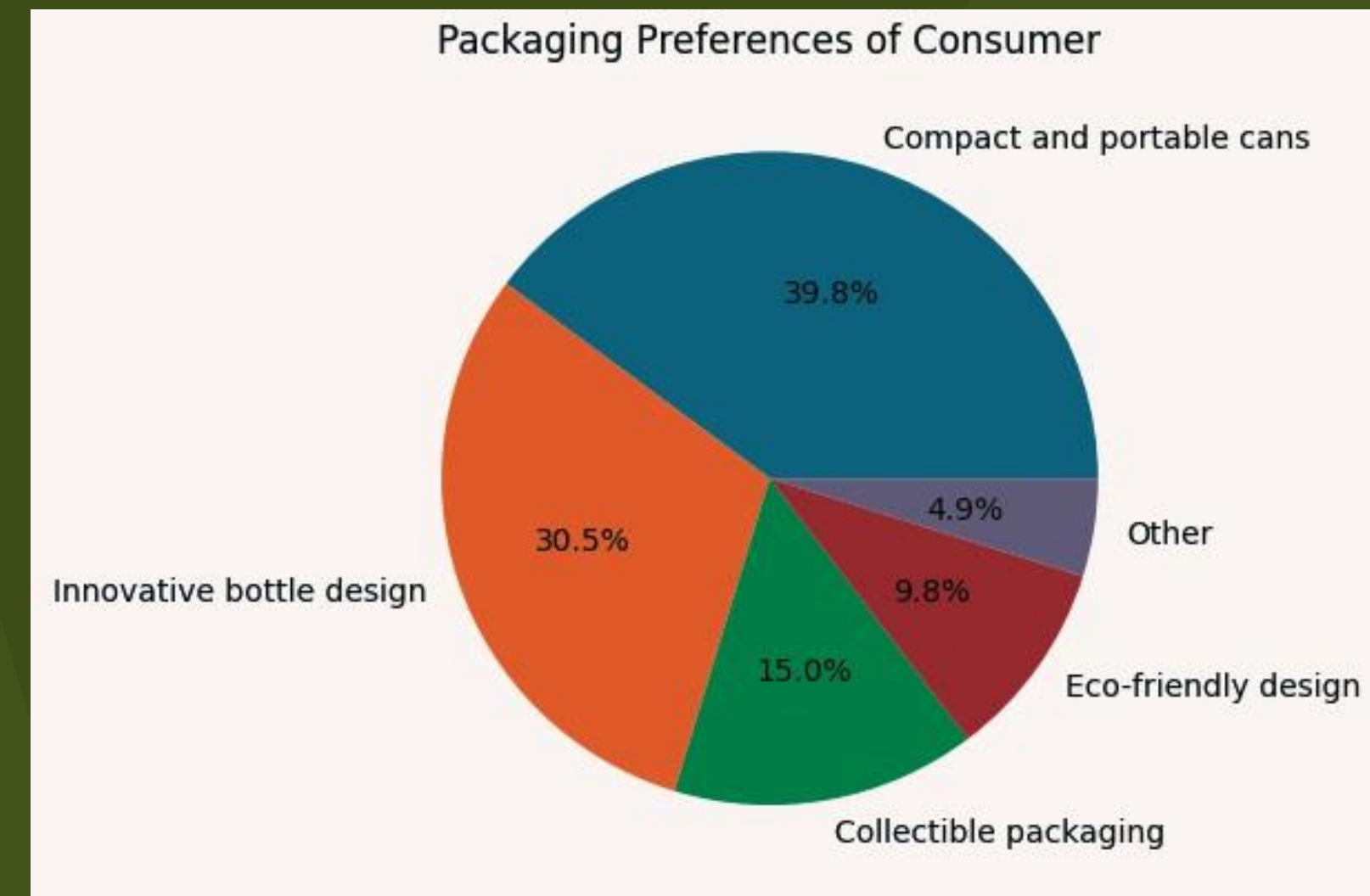
Caffeine is the most preferred energy drink by the respondents.





2. What packaging preferences do respondents have for energy drinks?

Compact and portable cans is the first choice of the people with around 40% but also around 31% of people choice is Innovative bottle and design which can also be considered or the mixture of both can be done.

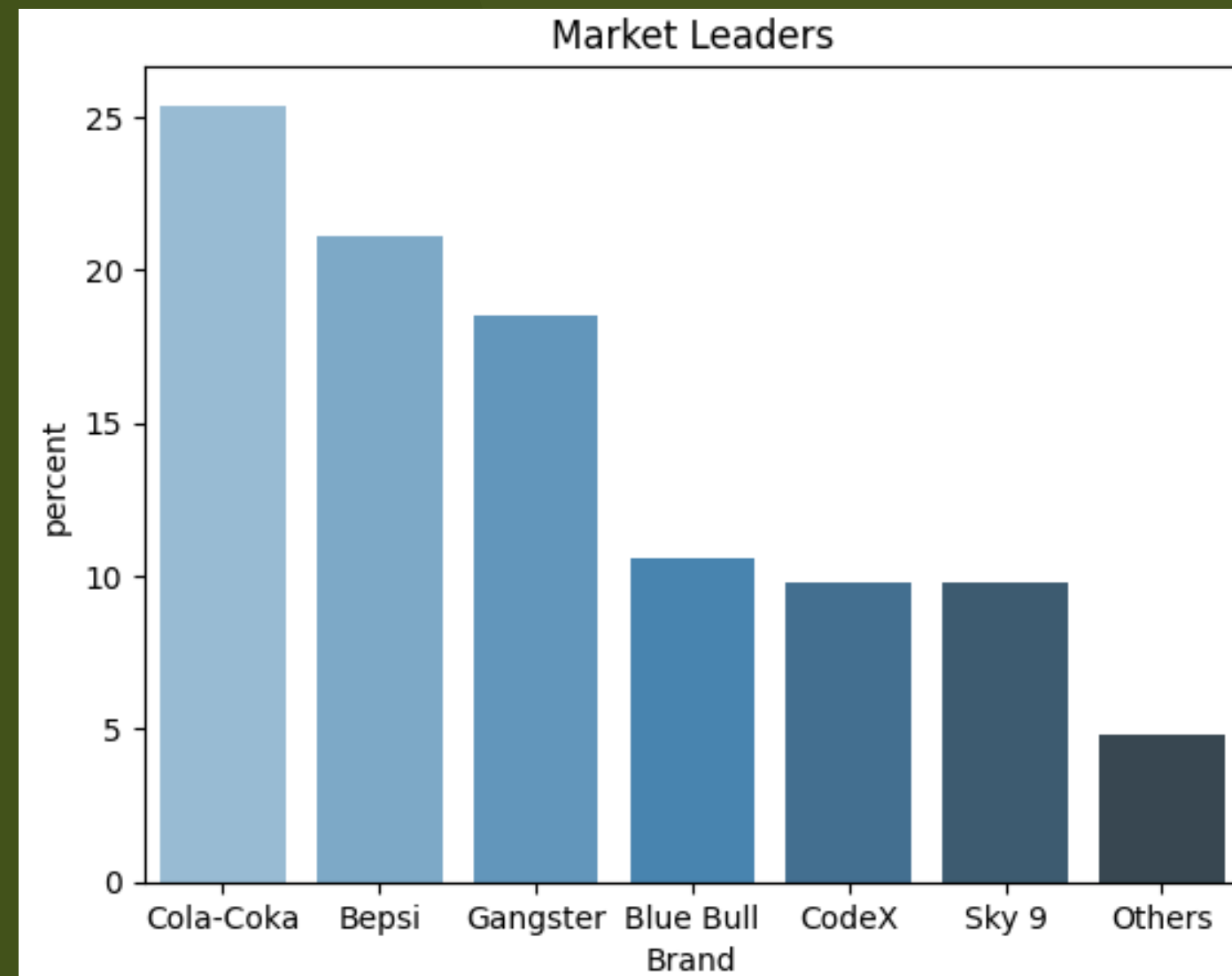




CoMpetition Analysis

1. Who are the current market leaders?

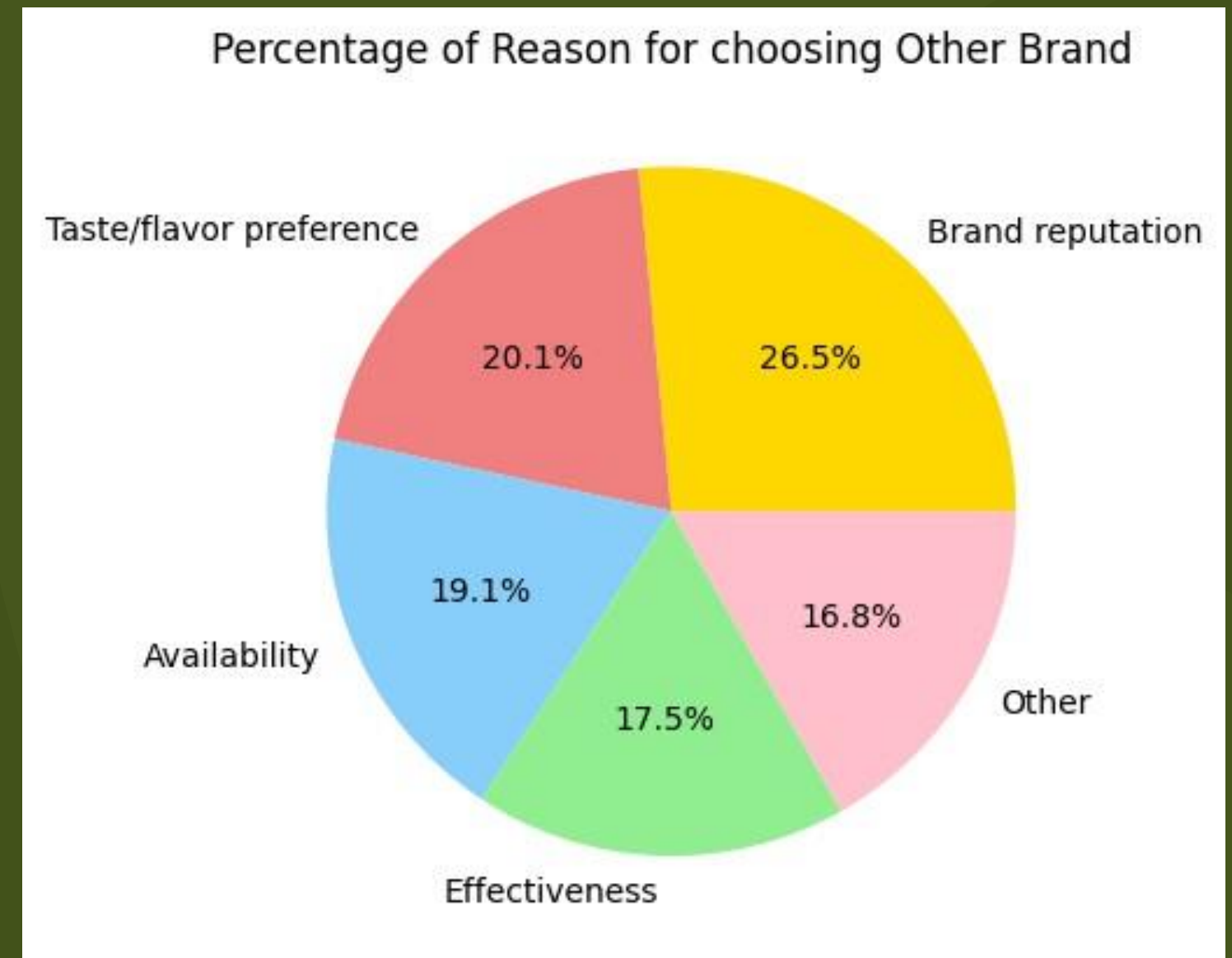
The current Market leaders are Cola-coka with 25.4% followed by Bepsi with 21%.





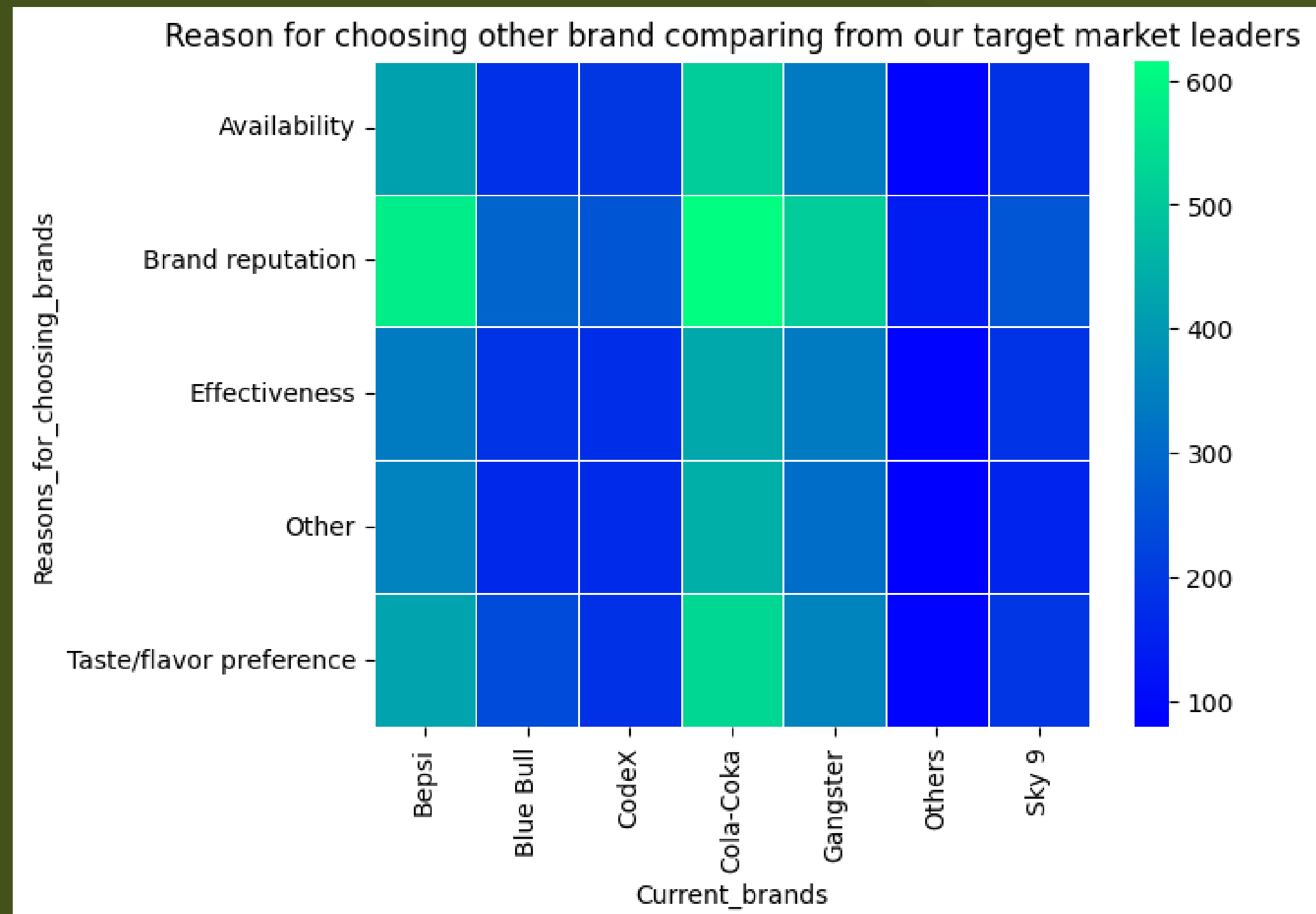
2. What are the primary reasons consumers prefer those brands over ours?

The primary reason for choosing Other brand over ours is Brand reputation with 27% and second most reason is Taste/flavour preferences.





Comparing the reson for choosing other brand with our target marget leaders





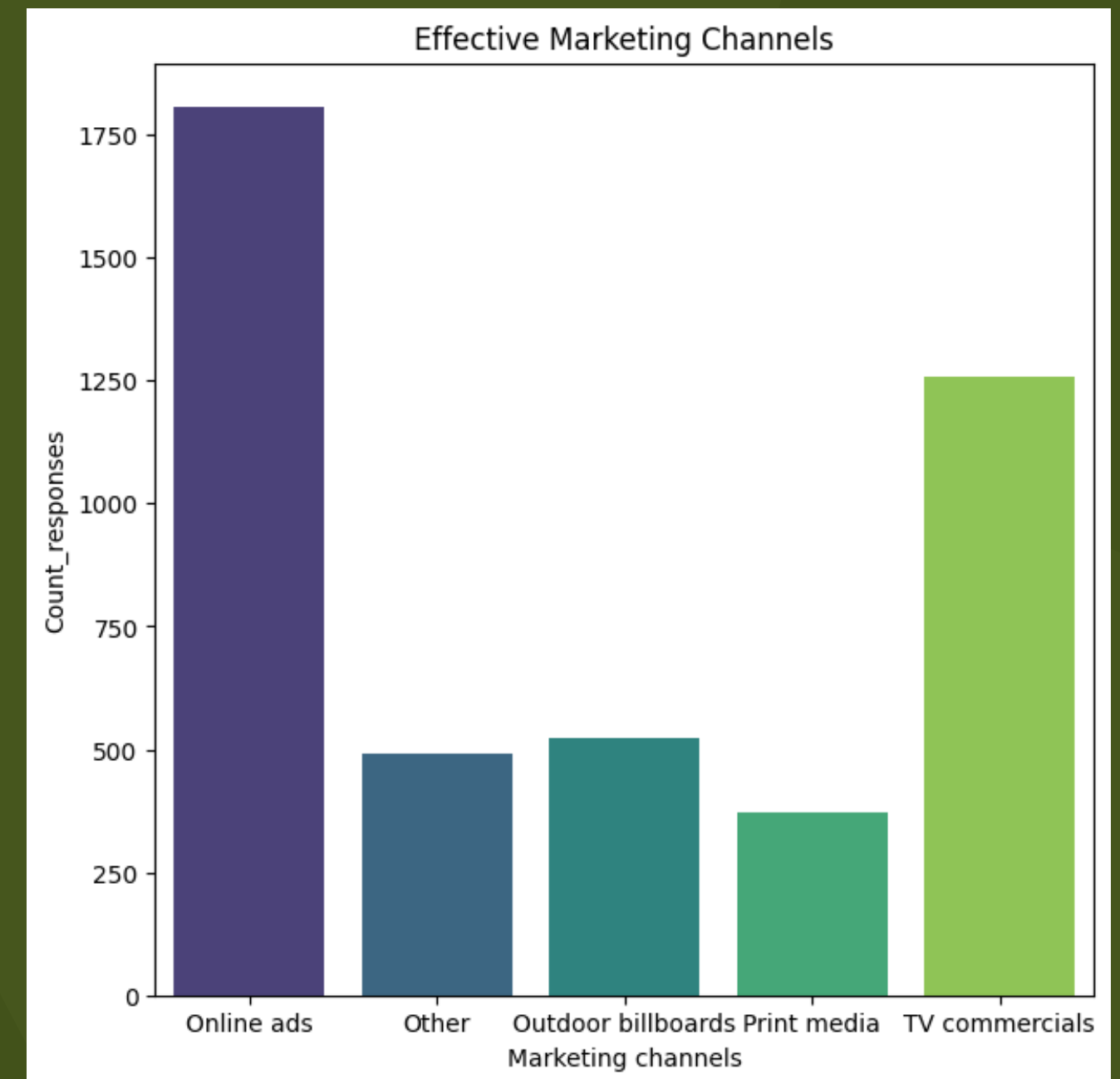
The top 3 reasons why respondents are choosing the market leaders like Cola-Coka and Bepsi

- Brand_reputation
- Taste/flavour
- Availability

Marketing Channels and Brand Awareness

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

As told earlier Online-ads and the TV commercials are two main marketing channels which are more effective in reaching our customers.





✦ Brand Penetration

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

```
#making a column Overall_rating for analysis
```

```
def overall_rating(value):  
    if value==0:  
        return np.nan  
    else:  
        if value==1:  
            return "poor"  
        elif value==2:  
            return "below average"  
        elif value==3:  
            return "average"  
        elif value==4:  
            return "good"  
        elif value==5:  
            return "excellent"
```

```
df1["overall_rating"]=df1["Taste_experience"].apply(overall_rating)
```

```
# Filtering inconsistent responses
```

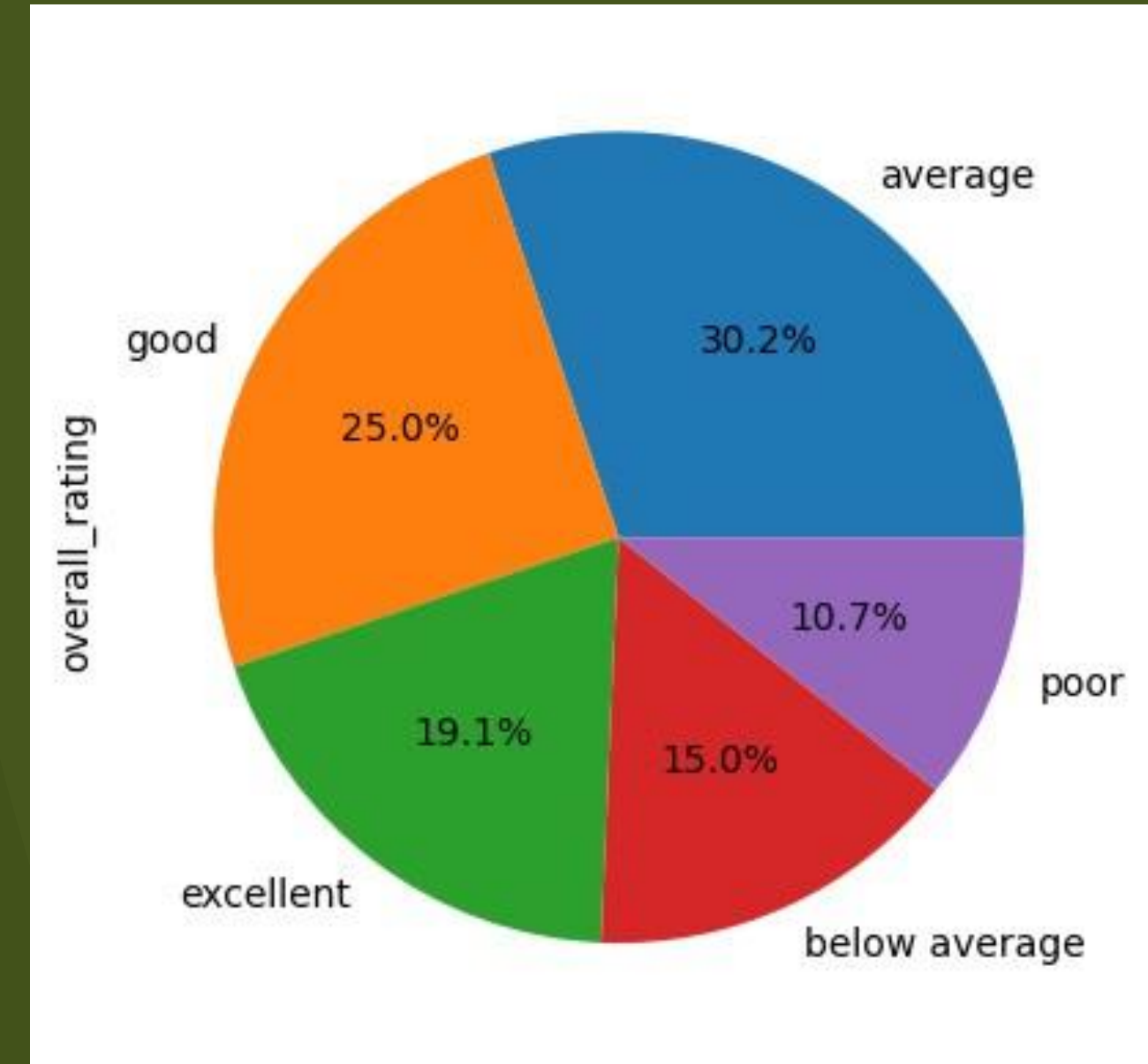
```
temp_df=df1[~((df1['Tried_before'] == 'No') & (df1['Taste_experience'] != 0))]
```



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

The Overall Rating of our brand is around 30% of people rated it average, 25% rated good and 20% is excellent.

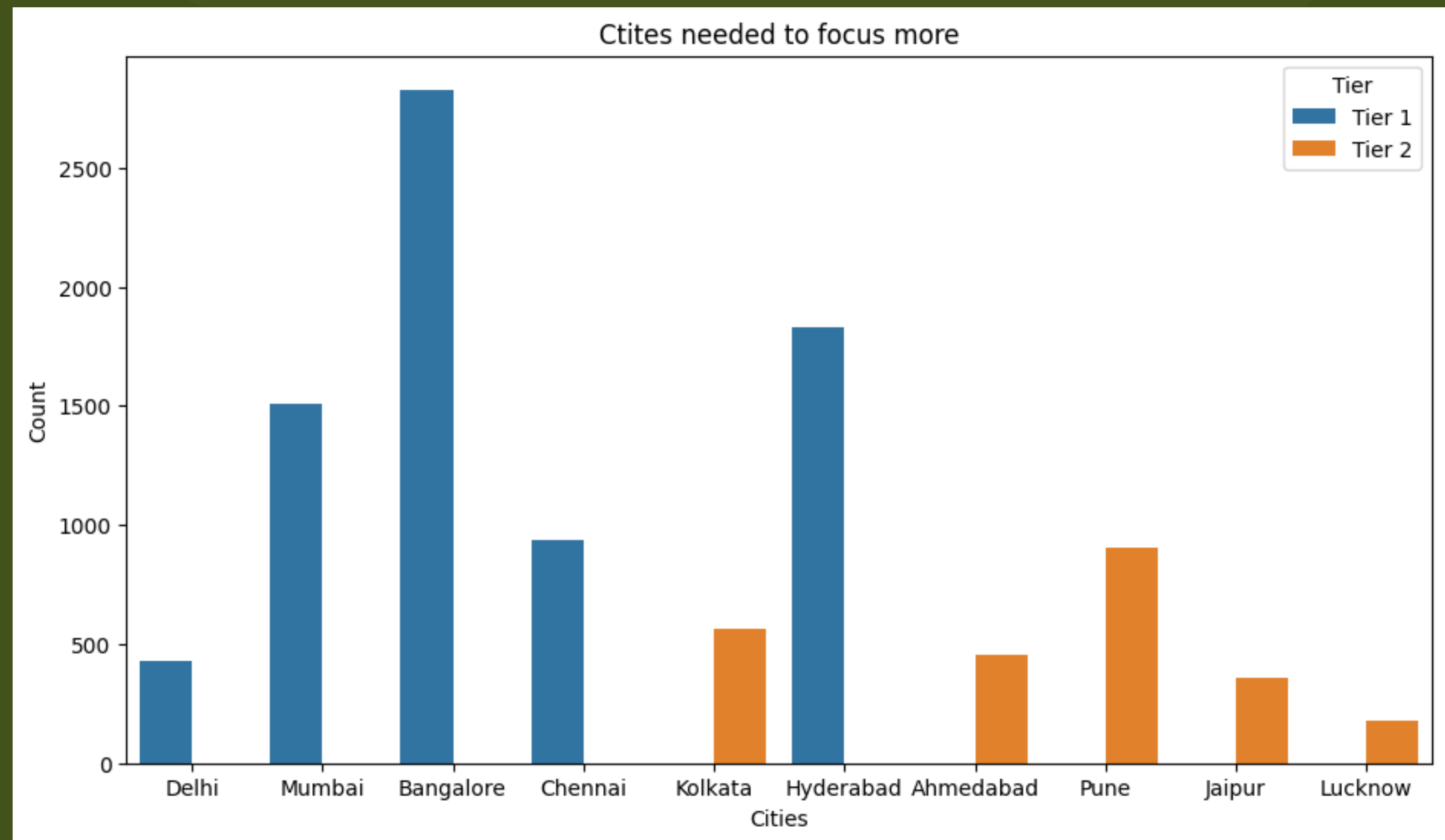
.





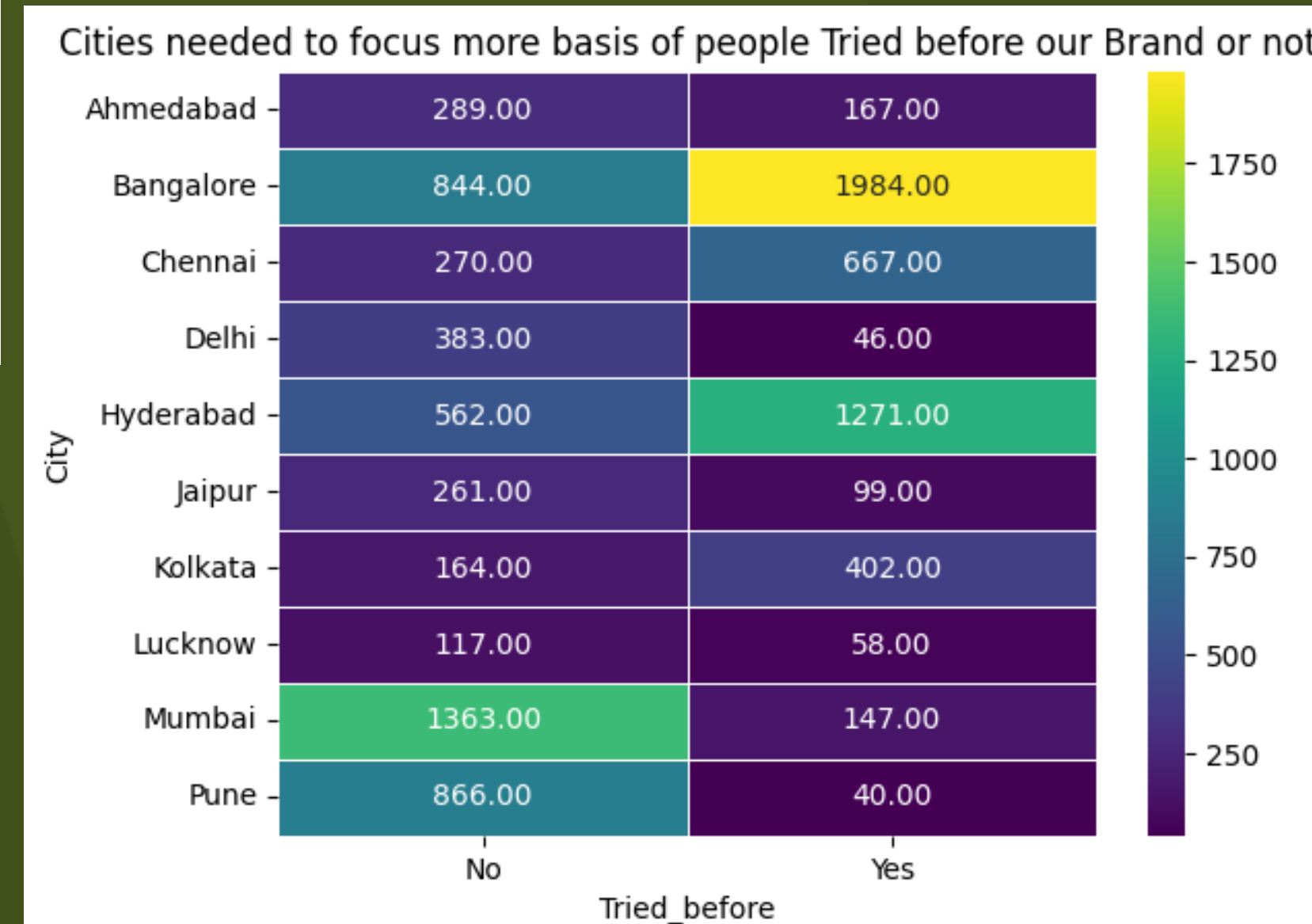
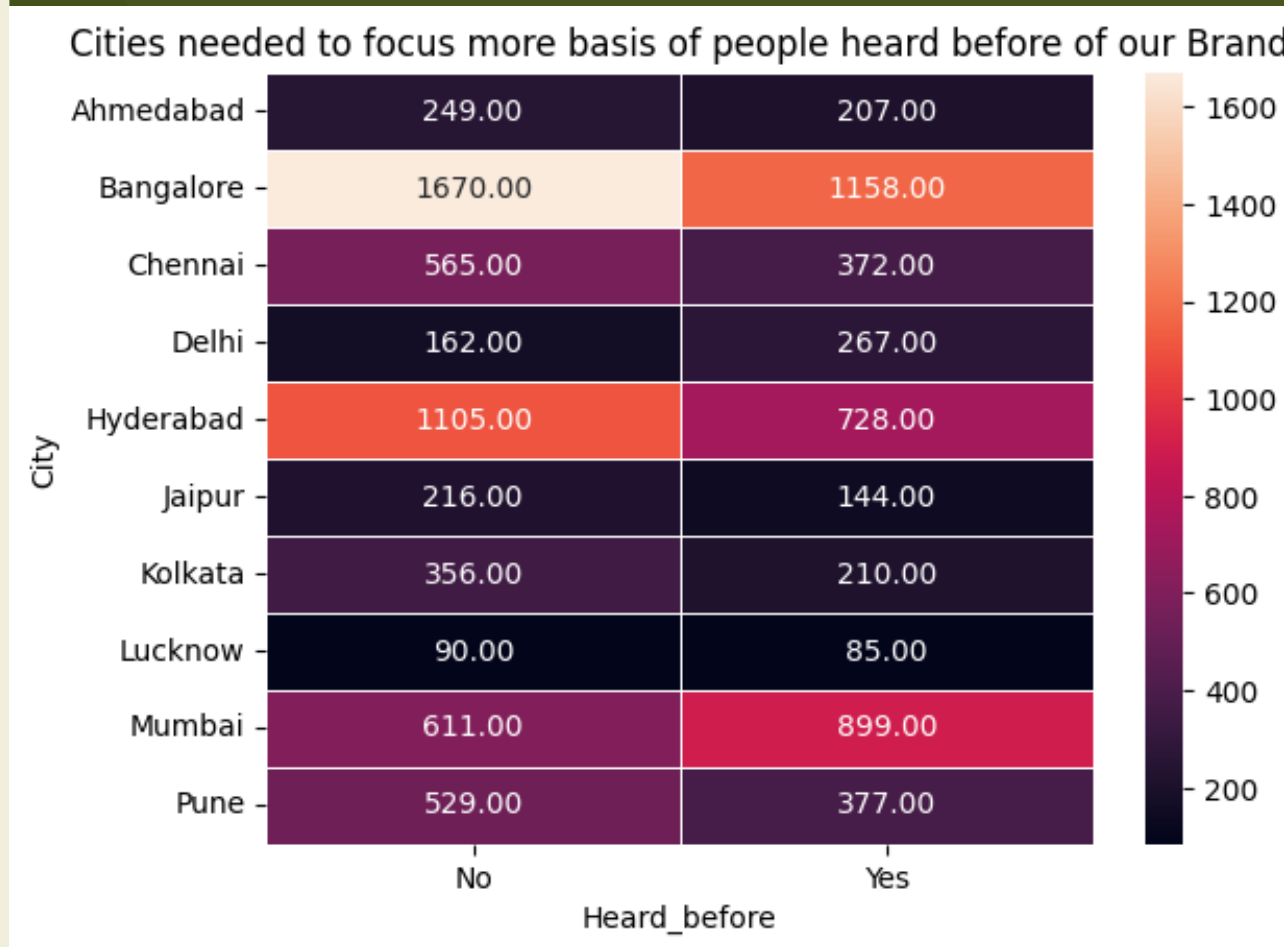
Which cities do we need to focus more on?

We need to focus more on Tier2 cities.



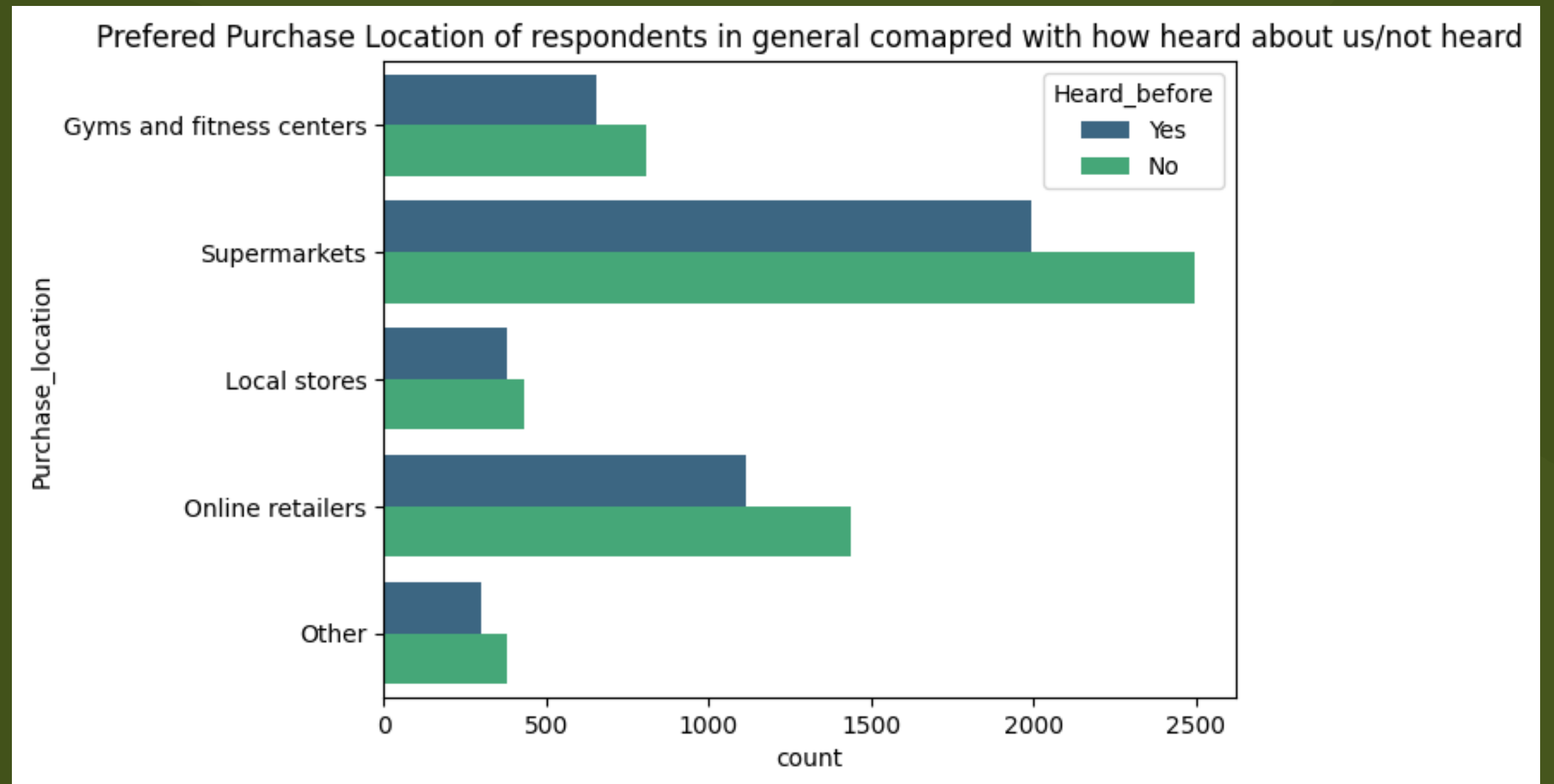


Which cities do we need to focus more on?

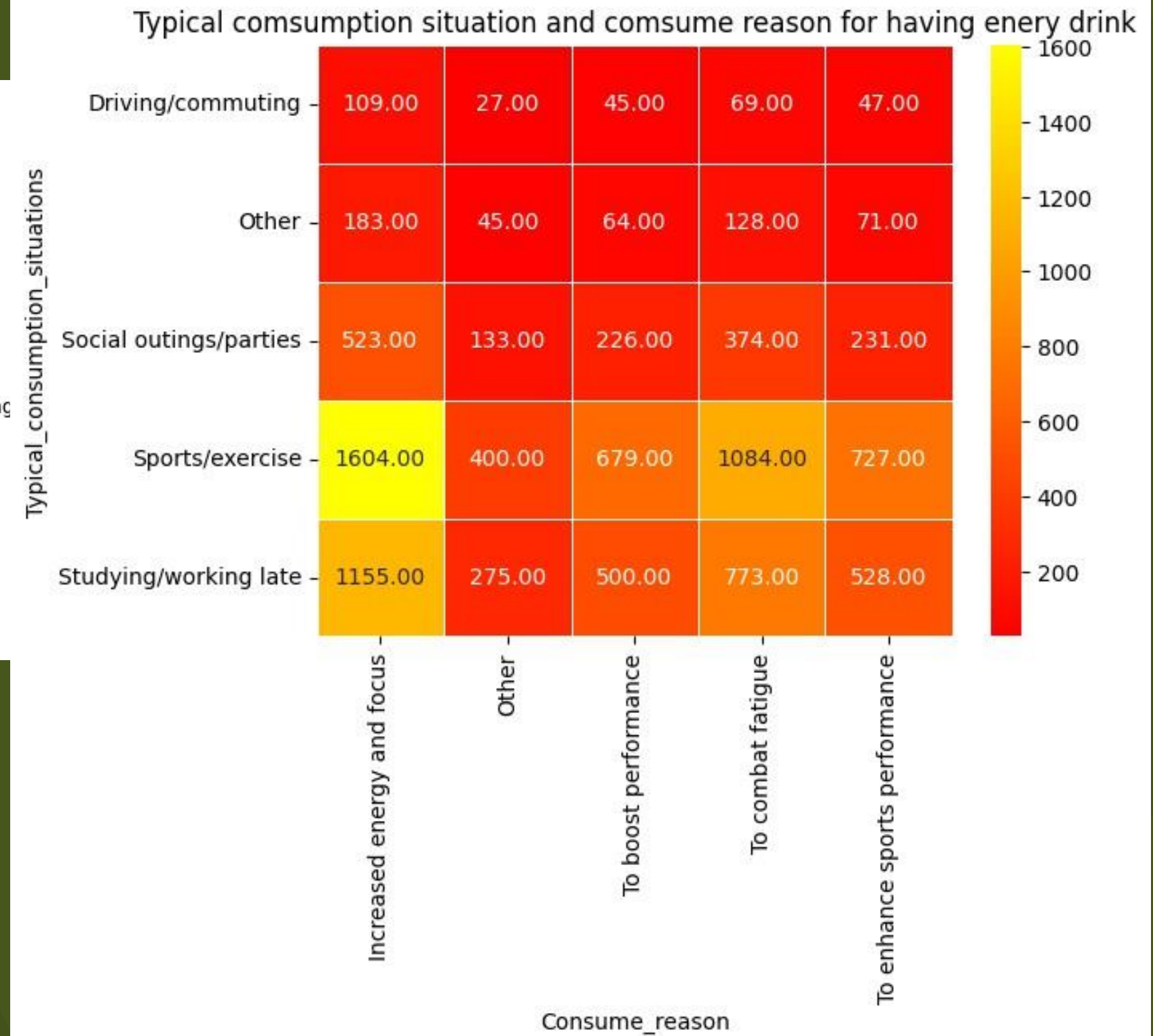
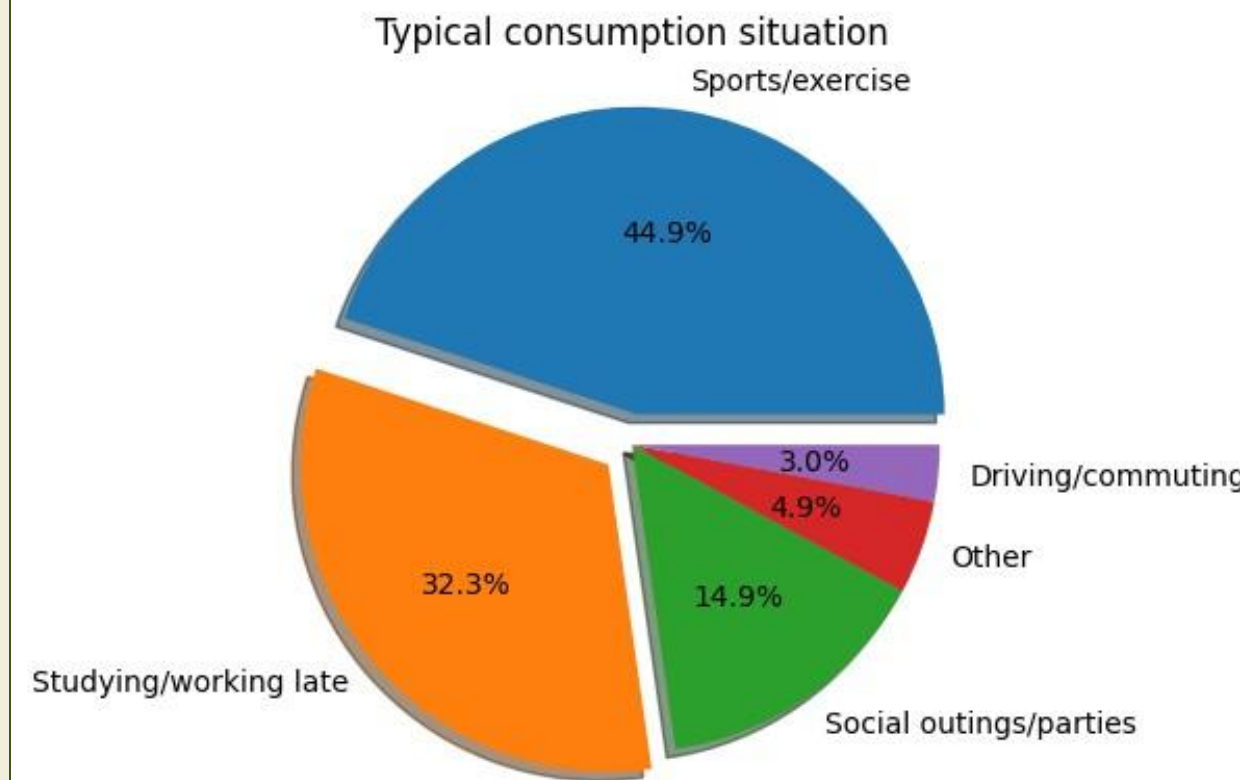


Purchase Behavior

1. Where do respondents prefer to purchase energy drinks?

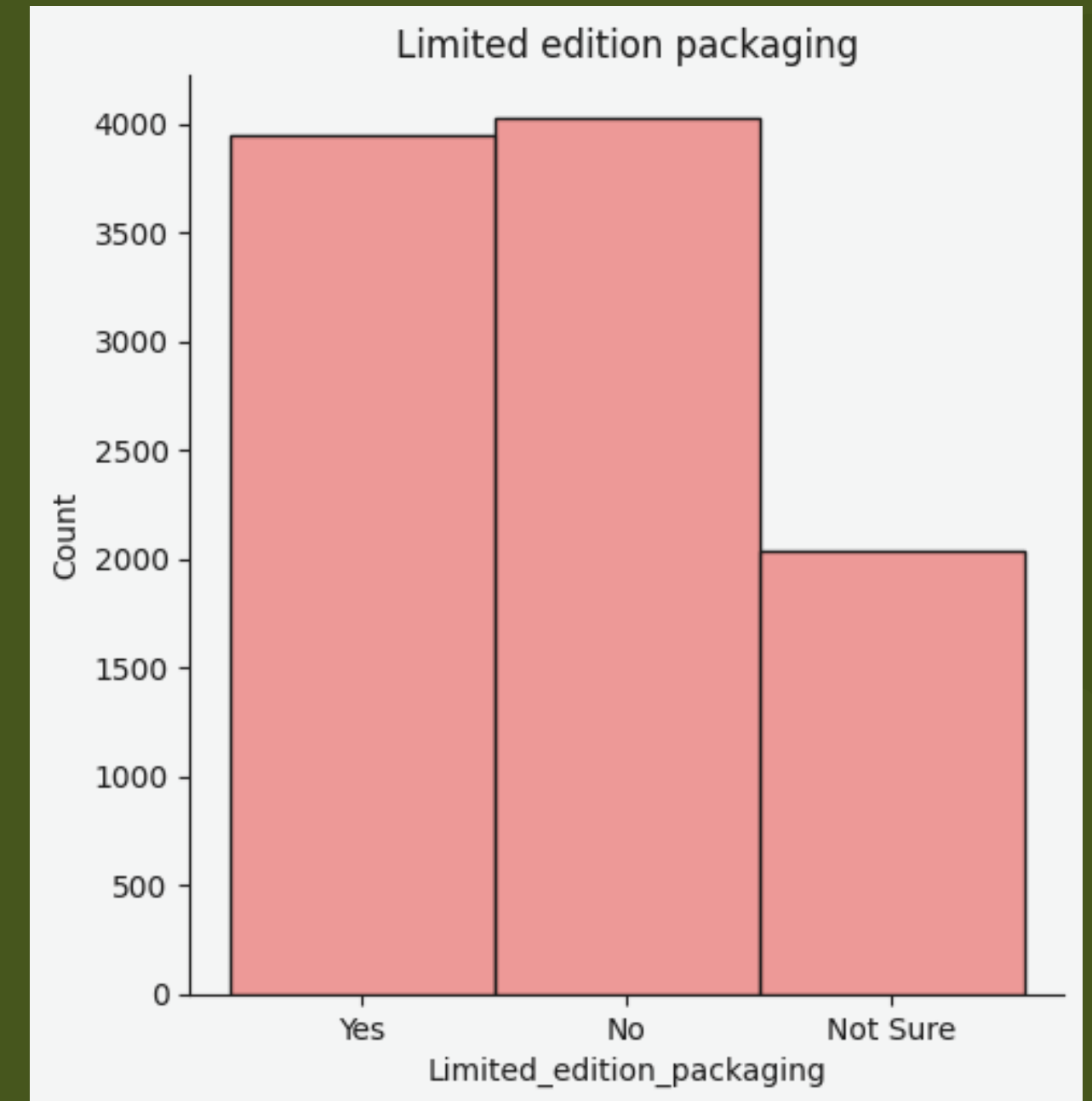
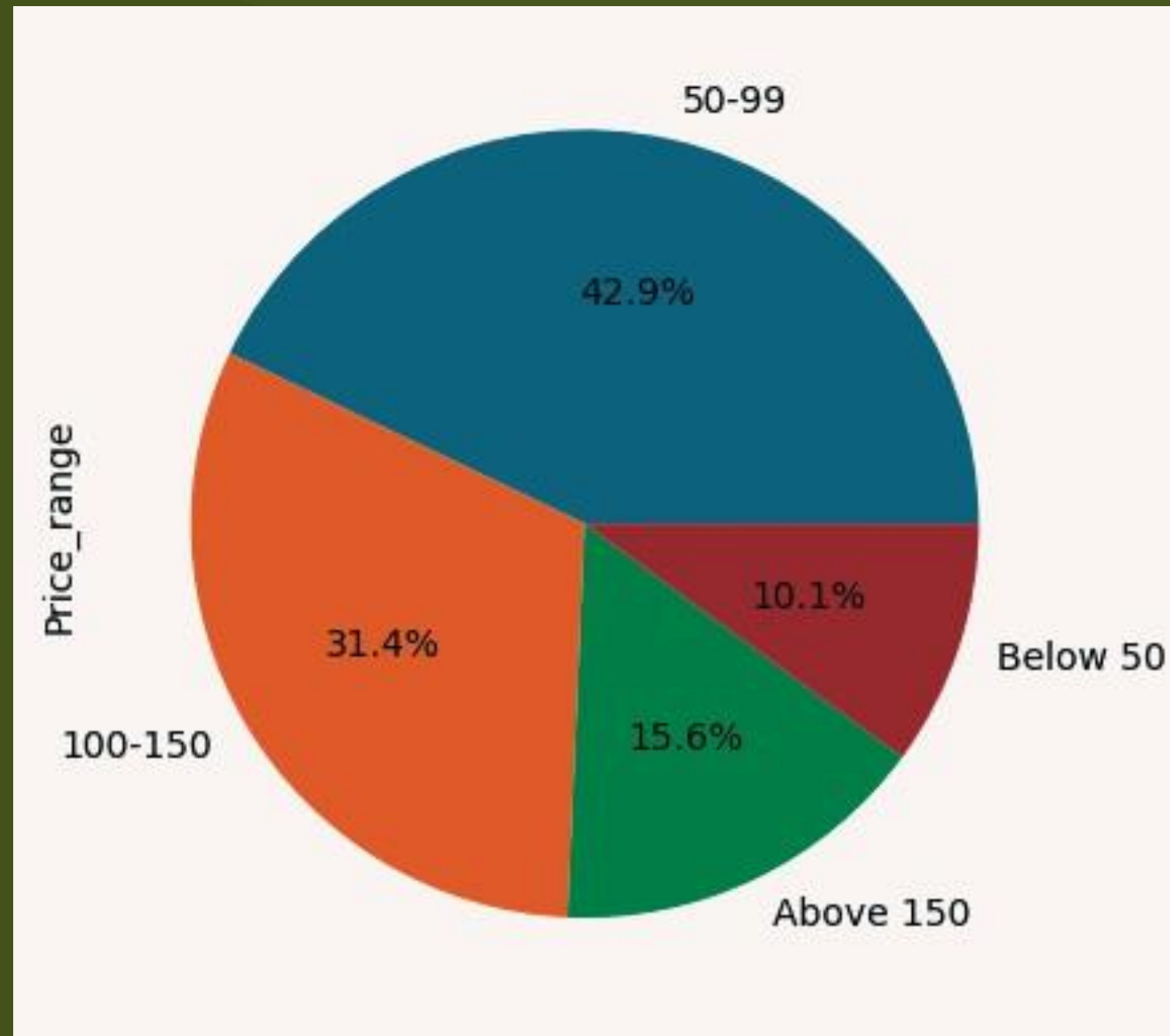


2. What are the typical consumption situations for energy drinks among respondents?



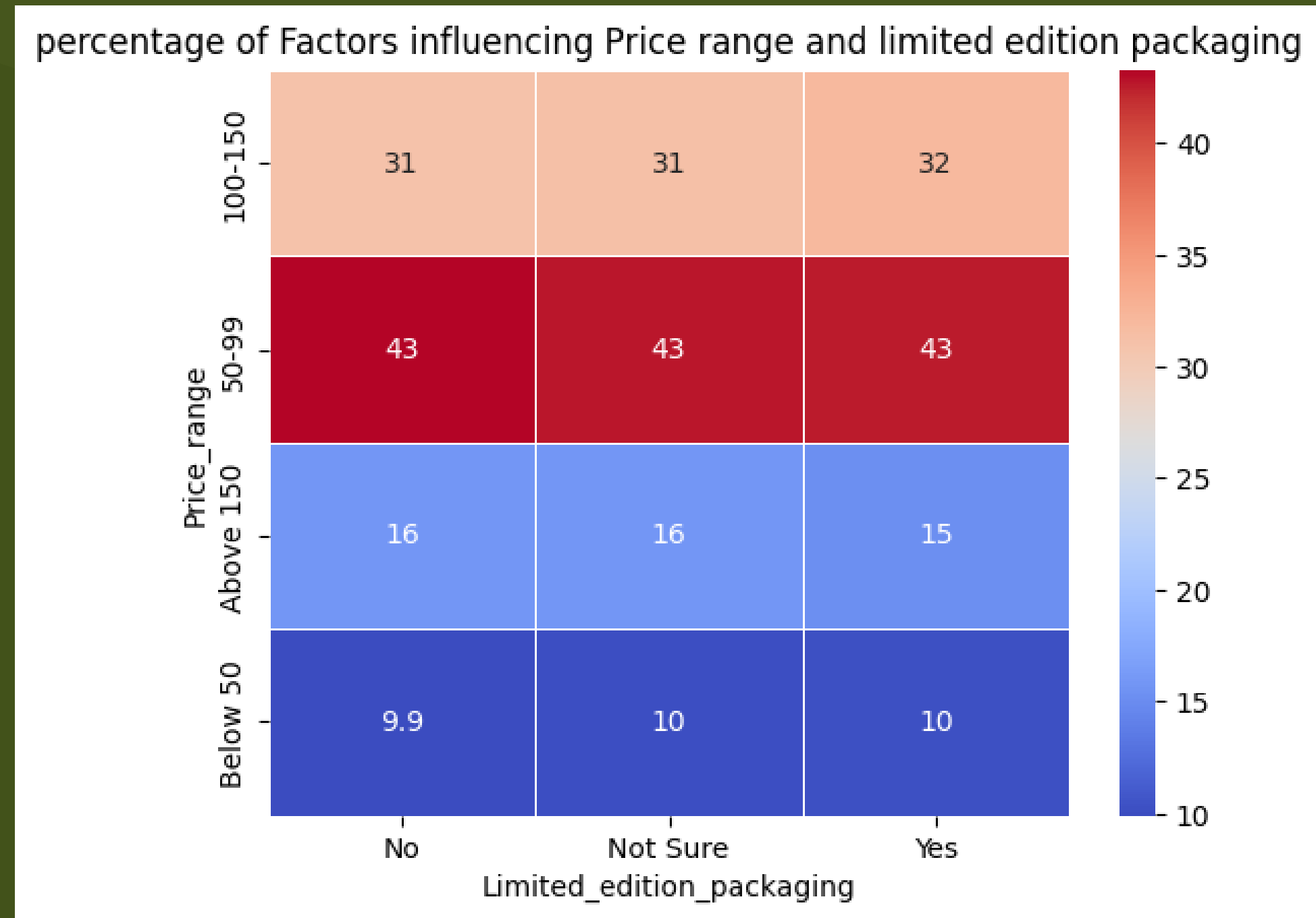


What factors influence respondents' purchase decisions, such as price range and limited-edition packaging?





The factors influencing respondents purchase decisions corelating both price range and limited-edition packaging.





Product Development

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

```
] # Creating a new DataFrame 'ProductDev' and dropping inconsistent responses
Product_develop = df1[~((df1['Tried_before'] == 'No') & (df1['Taste_experience'] != 0))]

# Checking for taste more than 1 standard deviation less than the mean
taste = Product_develop[Product_develop['Taste_experience'] < Product_develop['Taste_experience'].mean() - Product_develop['Taste_experience'].std()]

# Checking for 'Not available locally'
availability = Product_develop[Product_develop['Reasons_preventing_trying'] == 'Not available locally']

# Checking for negative branding
branding = Product_develop[(Product_develop['Brand_perception'] == 'Negative') | (Product_develop['Brand_perception'] == 'Neutral')]

# Counting the number of respondents for each focus area
focus_areas = {
    'Taste': len(taste),
    'Availability': len(availability),
    'Branding': len(branding)
}

focus_areas

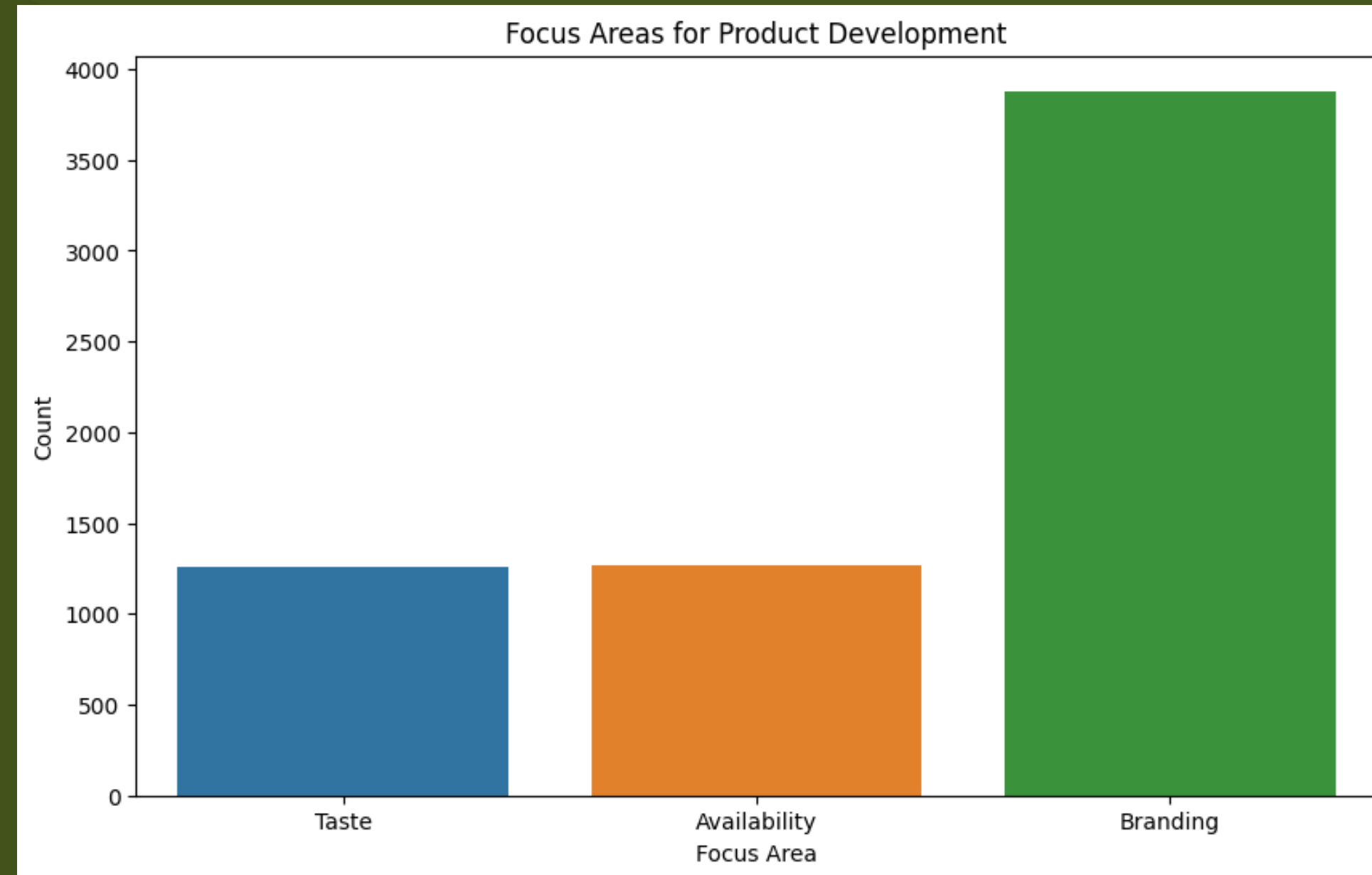
{'Taste': 1254, 'Availability': 1266, 'Branding': 3879}

# Create a DataFrame for visualization
focus_areas_df = pd.DataFrame({
    'Focus Area': list(focus_areas.keys()),
    'Count': list(focus_areas.values())
})

# Plotting the focus areas
plt.figure(figsize=(10, 6))
sns.barplot(x='Focus Area', y='Count', data=focus_areas_df)
plt.title('Focus Areas for Product Development')
plt.ylabel('Count')
plt.show()
```



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



RecoMMendations ✨

1. What immediate improvements can we bring to the product?

The immediate improvement we can bring to the product is to make it available in the cities, also secondly, we can reduce the sugar content in the product and use products like caffeine or organic or natural ingredients.




```
#What immediate improvements can we bring to the product?
```

```
pd.crosstab(df1["City"],df1["Reasons_preventing_trying"])
```

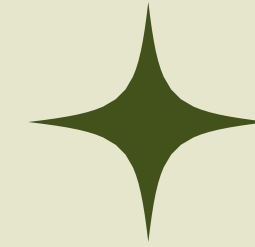
Reasons_preventing_trying	Health concerns	Not available locally	Not interested in energy drinks	Other	Unfamiliar with the brand
City					
Ahmedabad	109	64	160	18	105
Bangalore	691	709	562	430	436
Chennai	228	231	182	155	141
Delhi	108	75	114	25	107
Hyderabad	460	511	345	253	264
Jaipur	20	121	68	60	91
Kolkata	22	204	109	93	138
Lucknow	7	58	39	29	42
Mumbai	374	236	433	75	392
Pune	239	222	181	130	134

```
#What immediate improvements can we bring to the product?
```

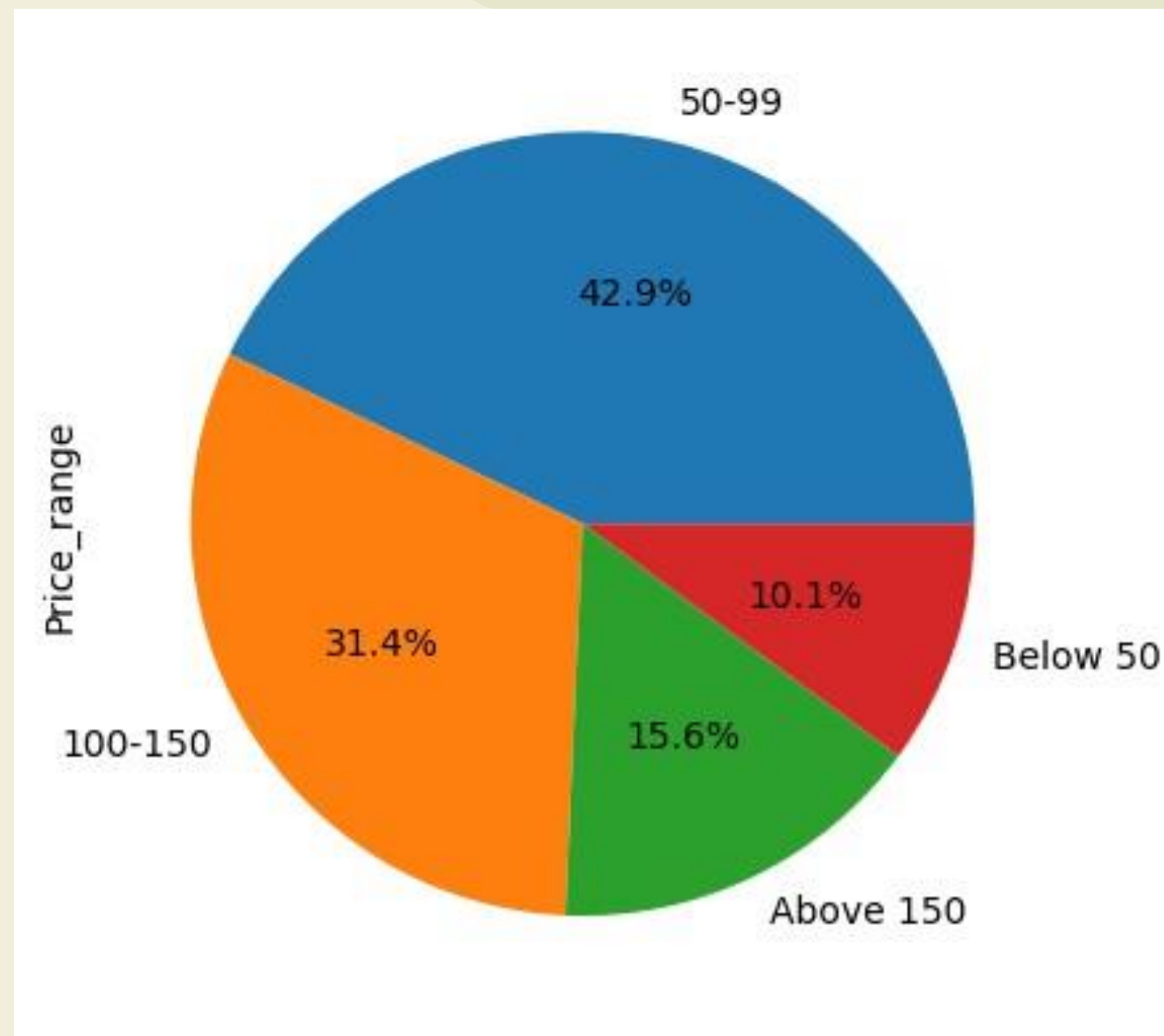
```
pd.crosstab(df1["Health_concerns"],df1["Interest_in_natural_or_organic"])
```

Interest_in_natural_or_organic	No	Not Sure	Yes
Health_concerns			
No	1239	778	1938
Yes	1823	1177	3045

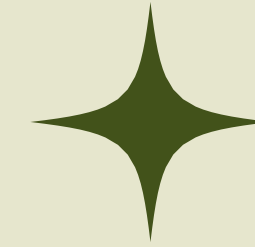
2. What would be the ideal price of our product?



The Ideal price range of our drink should be between
50-150



3. What kind of marketing campaigns, offers, and discounts we can run?



offers what we can give is like we they buy 5 cans they get 15% discount, we can also provide them coupon codes , or referral discount (as if they refer their friends or family then they get some 10% discount on next purchase or small gift voucher), this way we can gain the customer base also and aware people about our brand.



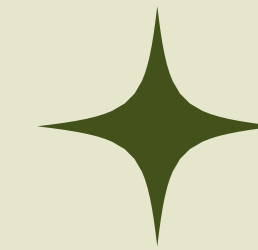
4. Who can be a brand ambassador, and why?



we can choose our brand ambassador someone from sport/exercise as the consumption of energy drink situation is more before sport/exercise expert as they their rate is higher than others so we can choose actress shilpa shetty or sports person like Neraaj chopra. as they are more fitness enthusiast



5. Who should be our target audience, and why?



Our target audience should be people of age between 15-45, mainly male and female especially gym/sports/exercise people and study or working people. because as per the earlier analysis these category people mainly prefer energy drink. 2-3 times a week or daily.



```
# Grouping the data by 'Gender' and 'Age' and calculating the consume frequency count
#Target audience
gender_age_consume = df1.groupby(['Gender', 'Age'])['Consume_frequency'].value_counts().unstack().fillna(0)

gender_age_consume
```

		Consume_frequency				
		2-3 times a month	2-3 times a week	Daily	Once a week	Rarely
Gender	Age					
Female	15-18	74	198	57	78	109
	19-30	301	652	272	311	355
	31-45	144	292	112	125	161
	46-65	19	48	16	33	22
	65+	11	27	9	14	15
Male	15-18	147	312	131	156	157
	19-30	531	1159	431	533	683
	31-45	236	488	217	221	273
	46-65	41	95	25	48	52
	65+	13	40	13	15	21
Non-binary	15-18	11	29	8	10	11
	19-30	59	106	33	44	50
	31-45	18	29	19	15	26
	46-65	6	12	1	5	3
	65+	2	4	2	1	3





Thank you

Thanks for watching this presentation.

