TASK

1

CUSTOMER SENTIMENT ANALYSIS

Food Delivery Service Of Customer Sentiment Analysis

INTRODUCTION

- In today's fast-paced world, food delivery services play a crucial role in customer convenience and satisfaction. Companies like QuickEats rely on customer feedback to improve their services and stay competitive. To enhance their 30-minute delivery guarantee, QuickEats implemented customer sentiment analysis to understand how customers feel about their delivery experience.
- By analyzing feedback from app reviews, social media, and customer support interactions, QuickEats identified key pain points and positive trends. This data-driven approach allowed them to optimize delivery operations, improve customer support, and refine their marketing strategies.
- This case study explores how sentiment analysis helped QuickEats address delivery issues and enhance customer satisfaction.

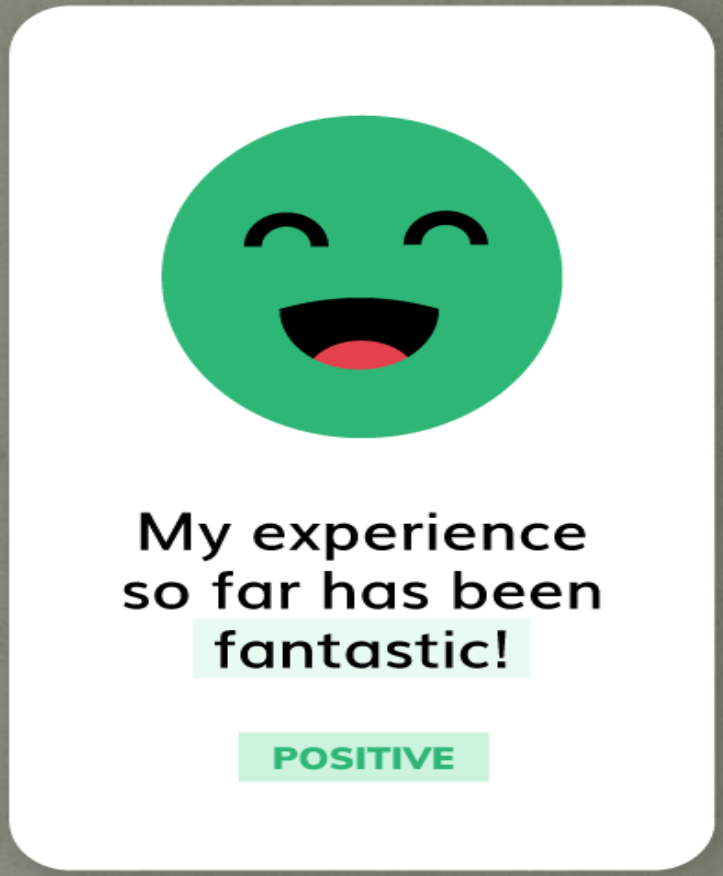
Customer Sentiment Review

- Customer sentiment analysis helps to understand how consumers feel about Food Delivery service and by categorizing feedback into three main types:

- POSITIVE SENTIMENT
- NEGATIVE SENTIMENT
- NEUTRAL SENTIMENT

❖ POSITIVE SENTIMENT

- Customers who appreciate food delivery often highlighting the Food Quality And Quick Delivery Timing.
- Easy to ordering And fresh hot food
- Secure Packaging And Generous portions
- Friendly Delivery Staff And Great value

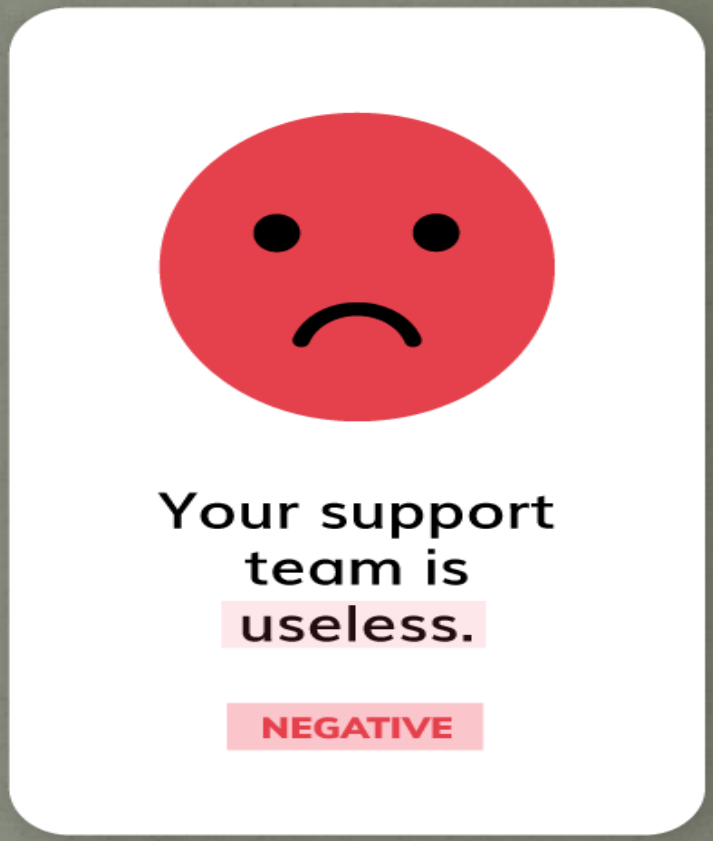


❖ NEUTRAL SENTIMENT

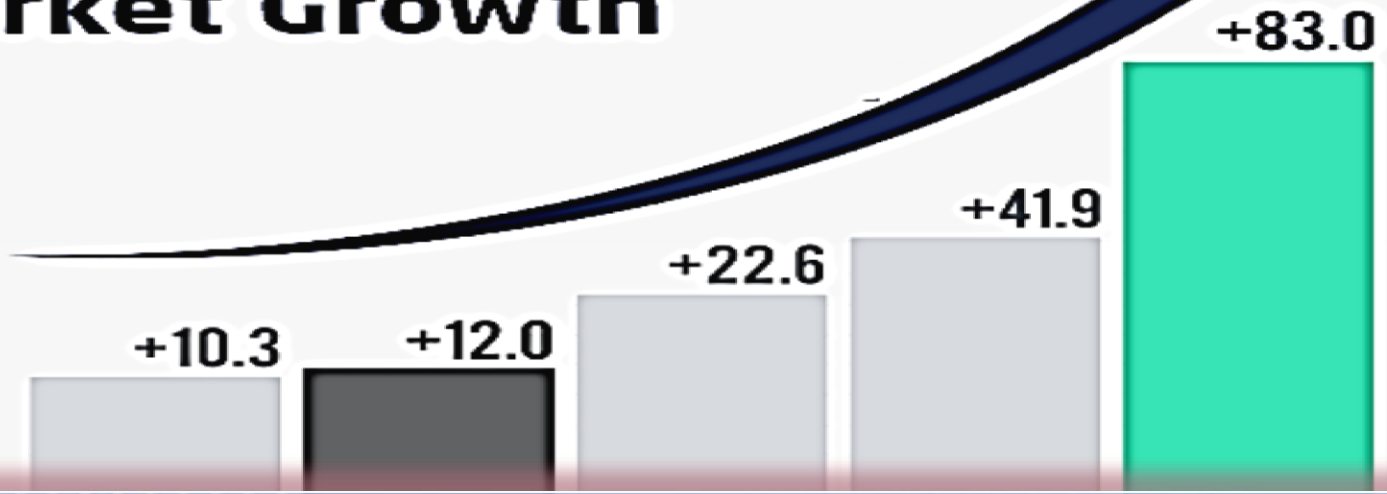
- The service is generally reliable, with deliveries mostly arriving on time.
- The app is user-friendly and offers a good selection of restaurants.
- Food temperature is not maintained, sometimes arriving lukewarm
- Overall, the service is convenient but could improve in consistency and efficiency.

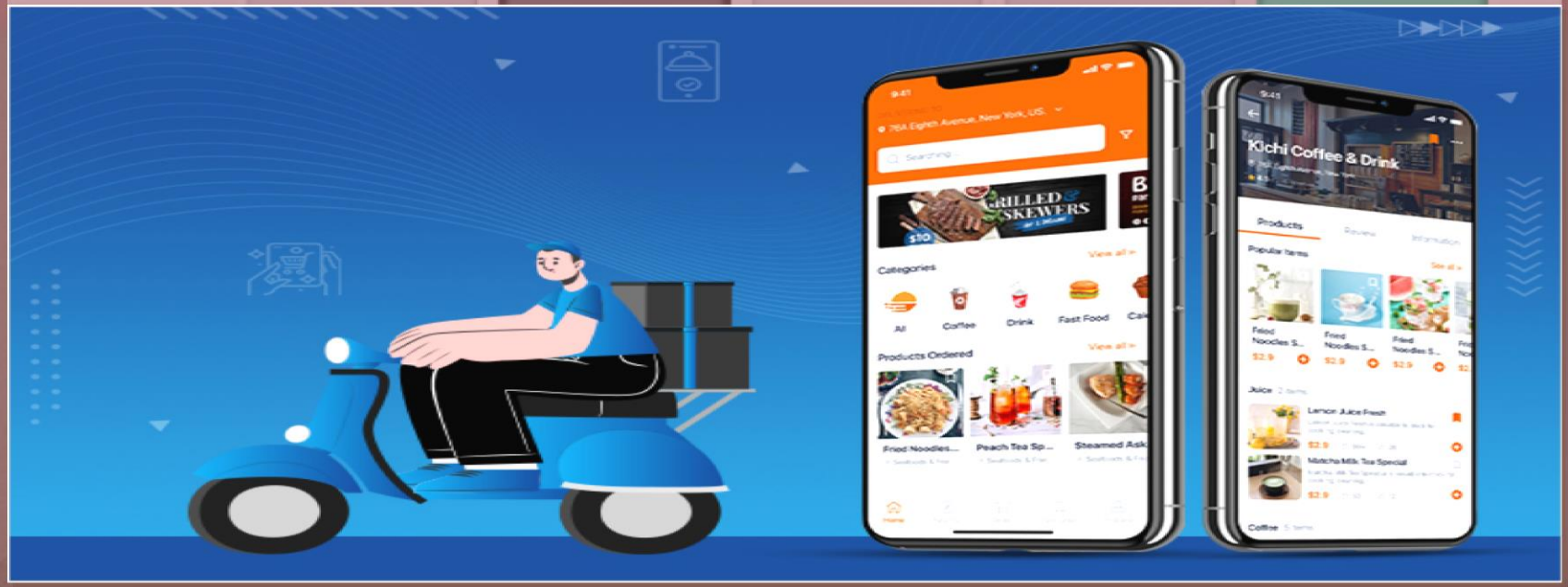
❖ NEGATIVE SENTIMENT

- Frequent delays, especially during peak hours, making it unreliable.
- Food often arrives cold or in poor condition.
- Customer service is slow to respond and not always helpful.
- Overall, the service needs significant improvement in efficiency and reliability.



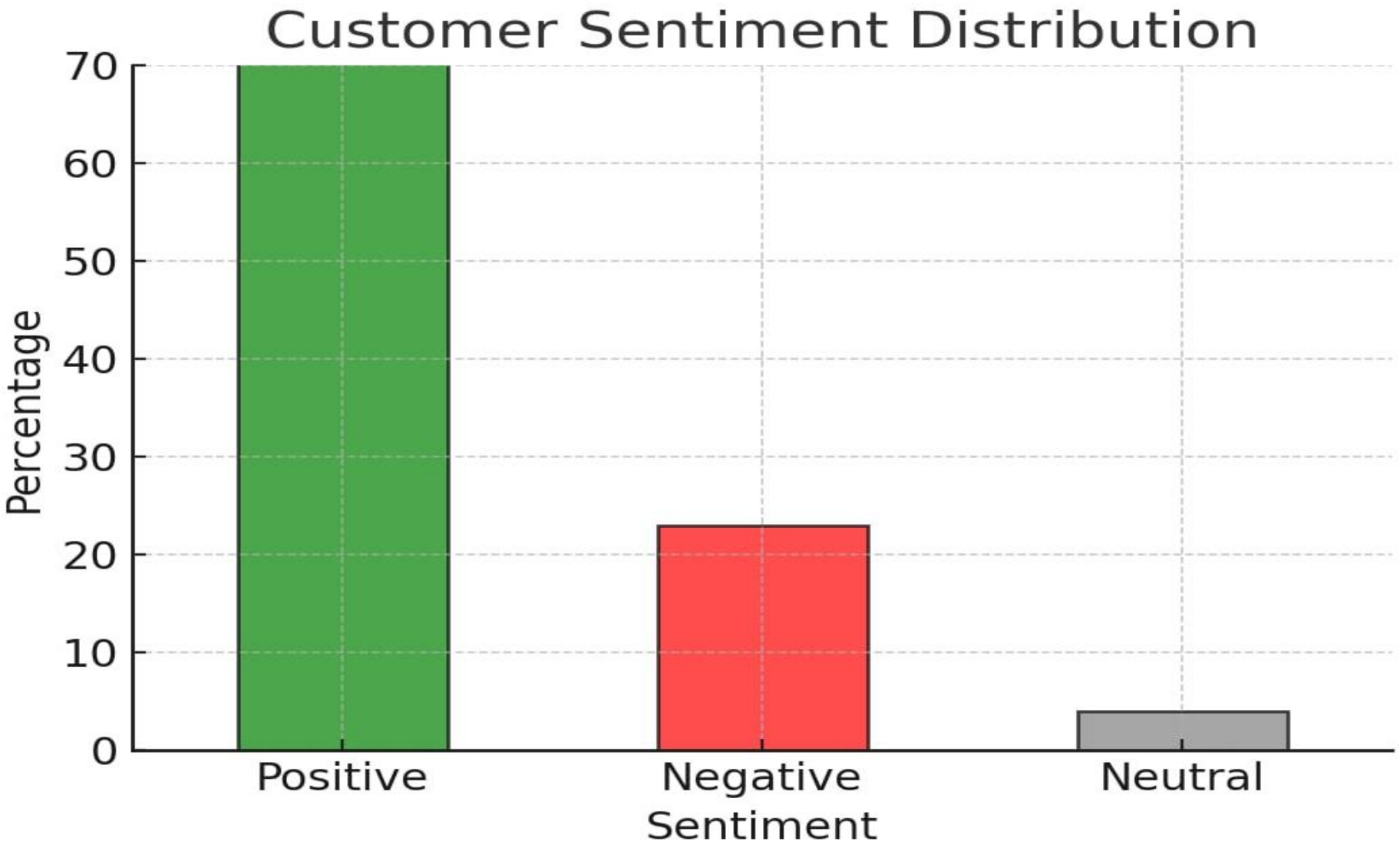
Online Food Delivery Market Growth



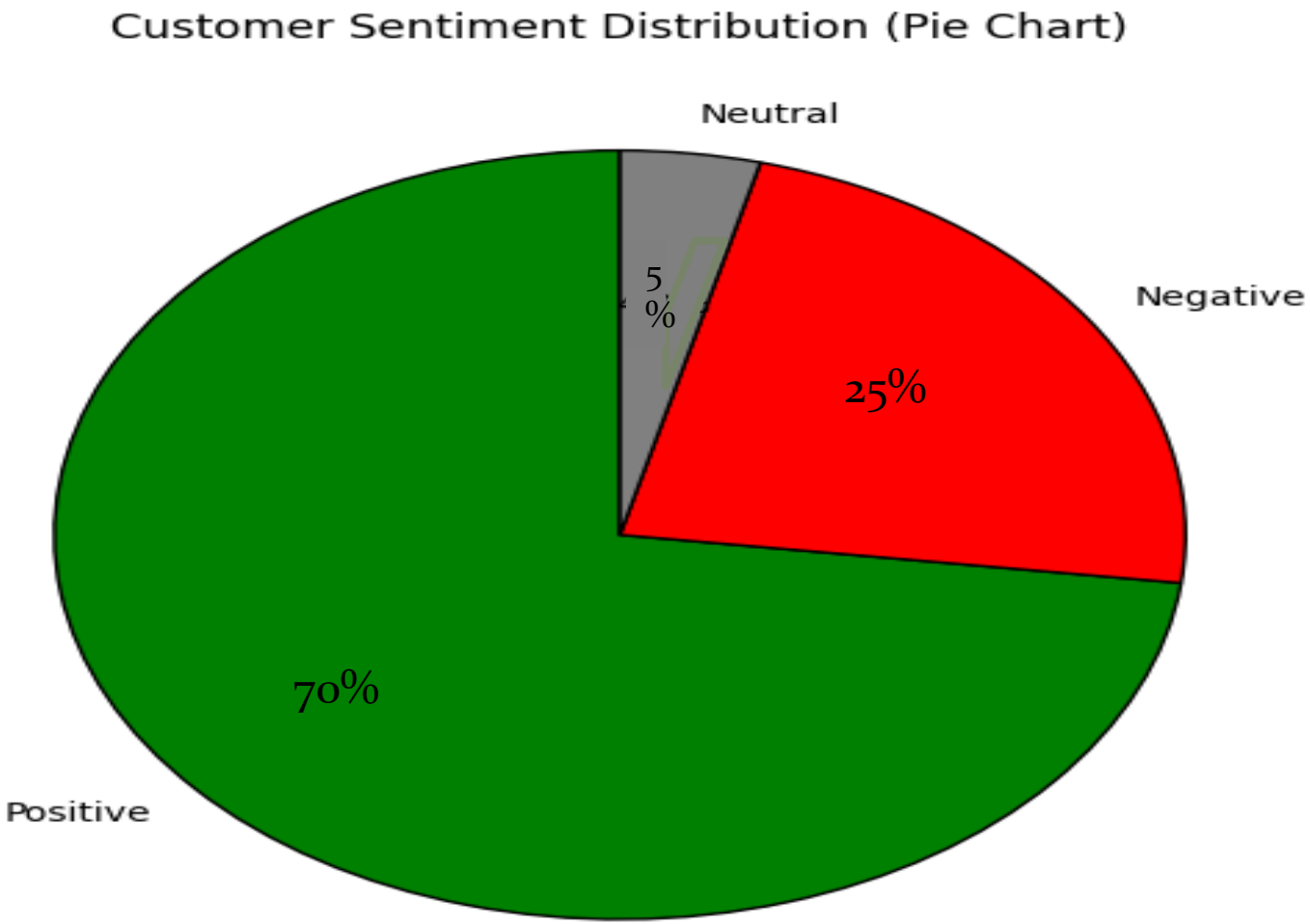


```python
import random
import matplotlib.pyplot as plt
import pandas as pd
from textblob import TextBlob

# Generate synthetic customer reviews with predefined sentiment distribution
positive_reviews = ["Great product!", "Loved it!", "Highly recommend!", "Best purchase ever!", "Excellent quality!"] * 13
negative_reviews = ["Terrible experience.", "Not worth it.", "Very disappointed.", "Worst product ever.", "Bad quality."] * 3
neutral_reviews = ["It's okay.", "Average product.", "Not bad, not great.", "Meh.", "Fine, I guess."] * 4

# Combine and shuffle reviews
all_reviews = positive_reviews + negative_reviews + neutral_reviews
random.shuffle(all_reviews)

# Sentiment analysis using TextBlob
def get_sentiment(text):
    analysis = TextBlob(text)
    if analysis.sentiment.polarity > 0:
        return "Positive"
    elif analysis.sentiment.polarity < 0:
        return "Negative"
    else:
        return "Neutral"

# Apply sentiment analysis
sentiments = [get_sentiment(review) for review in all_reviews]

# Create DataFrame
df = pd.DataFrame({"Review": all_reviews, "Sentiment": sentiments})

# Count sentiment occurrences
sentiment_counts = df["Sentiment"].value_counts(normalize=True) * 100

# Plot sentiment distribution - Bar Chart
plt.figure(figsize=(6, 4))
colors = ["green", "red", "gray"]
sentiment_counts.plot(kind="bar", color=colors, alpha=0.7, edgecolor="black")
plt.title("Customer Sentiment Distribution")
plt.xlabel("Sentiment")
plt.ylabel("Percentage")
plt.show()

# Plot sentiment distribution - Pie Chart
plt.figure(figsize=(6, 6))
sentiment_counts.plot(kind="pie", colors=colors, autopct='%1.1f%%', startangle=90, wedgeprops={'edgecolor': 'black'})
plt.title("Customer Sentiment Distribution (Pie Chart)")
plt.ylabel("")  # Hide y-label for clarity
plt.show()
```

OUTPUT :


Customer Sentiment Distribution
Percentage
70
60
50
40
30
20
10
0
Positive
Negative
Neutral
Sentiment

Pie chart :


Customer Sentiment Distribution (Pie Chart)
Neutral
5%
Negative
25%
70%
Positive