

Experiment No. 9

Aim: To analyse competitor activities using social media data.

Theory:

1. Advantage of competitive analysis.

Ans : Competitive analysis is the process of identifying and evaluating competitors' strategies to understand their strengths and weaknesses. It plays an important role in business decision-making, especially when using social media data.

- **Better Market Understanding :** By analyzing competitors, businesses can understand current market trends, customer preferences, and industry standards. This helps in aligning strategies with market demands.
- **Identifying Strengths and Weaknesses :** Competitive analysis highlights what competitors are doing well and where they are lacking. This allows a company to improve its own performance and avoid common mistakes.
- **Improved Marketing Strategy:** It helps businesses design better marketing campaigns by observing competitors' social media content, engagement levels, hashtags, and posting patterns.
- **Opportunity Identification :** By studying gaps in competitors' offerings, companies can identify new opportunities such as untapped markets, new features, or better pricing strategies.
- **Benchmarking Performance :** Businesses can compare their performance metrics (followers, engagement, traffic, etc.) with competitors to measure growth and success.
- **Risk Reduction :** Understanding competitors' failures and challenges helps businesses avoid similar risks and make more informed decisions.

2. Explain working of Similarweb. Attach a snapshot of the working of the tool.

Ans : Similarweb is a popular digital analytics tool used to analyze website traffic, competitor performance, and online behavior.

Step-by-Step Working of Similarweb

1. Data Collection

Similarweb collects data from multiple sources such as:

- Website crawlers
- ISP (Internet Service Provider) data
- Public data sources
- User panels and browser extensions

This ensures a large and reliable dataset.

2. Website Analysis

Users enter a website URL into Similarweb. The tool generates detailed insights including:

- Total website visits
- Traffic sources (Direct, Social, Referral, Search)
- Audience demographics
- Geographic distribution

3. Traffic Source Breakdown

Similarweb categorizes traffic into:

- **Direct Traffic** – users visiting directly
- **Search Traffic** – from search engines
- **Social Traffic** – from platforms like Instagram, Facebook, etc.
- **Referral Traffic** – from other websites

This helps in understanding where competitors are getting their audience.

4. Competitor Comparison

Users can compare multiple websites to analyze:

- Traffic differences
- Engagement metrics (bounce rate, session duration)
- Keyword rankings

5. Keyword and SEO Insights

Similarweb provides:

- Top organic keywords
- Paid keywords
- Search trends

This helps in improving SEO and digital marketing strategies.

6. Social Media Analysis

The tool shows which social platforms drive the most traffic to a competitor's website, helping businesses focus on the right platforms.

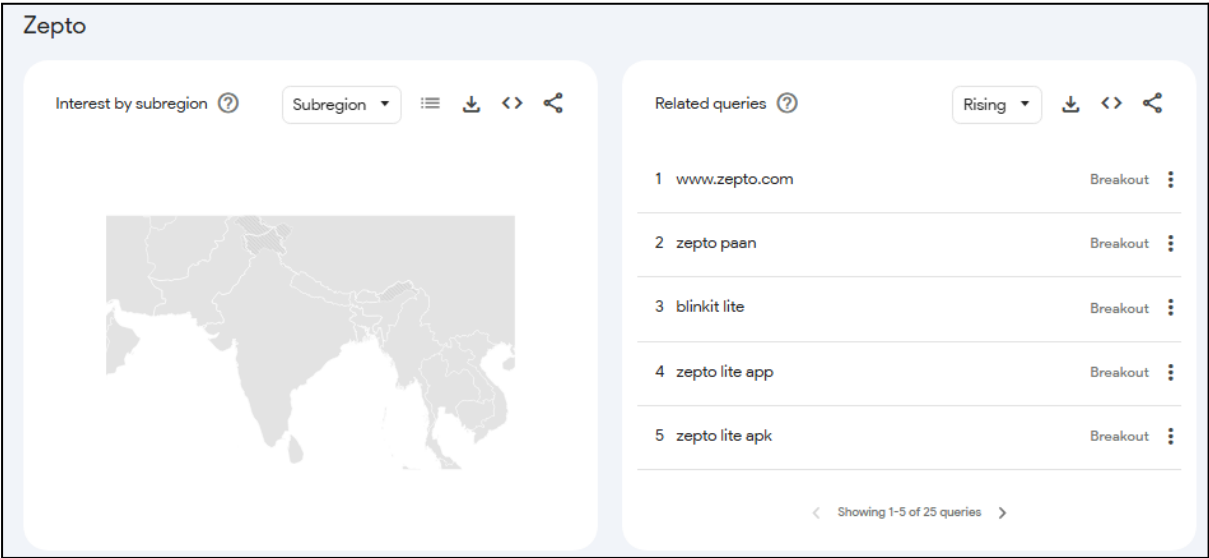
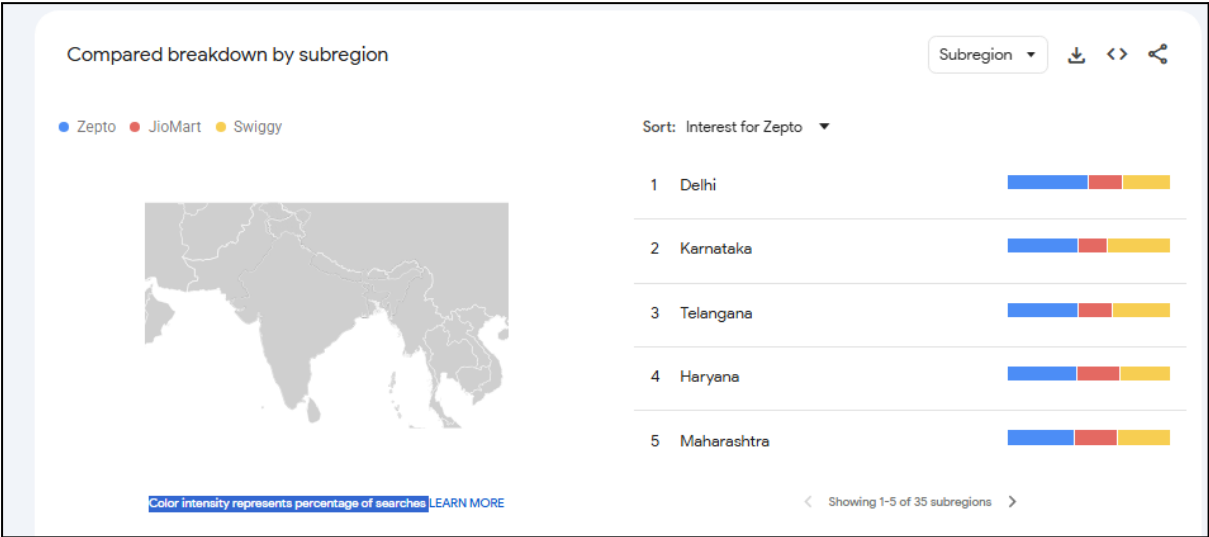
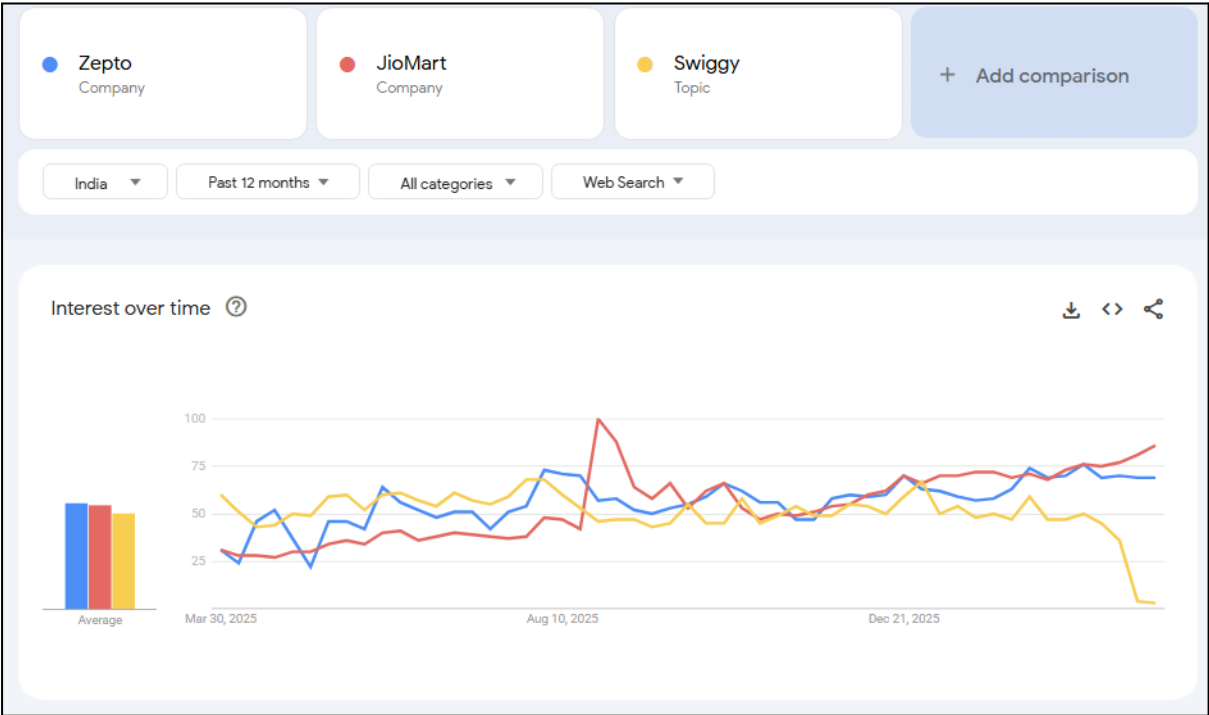
7. Visualization and Reports

All data is presented in dashboards, graphs, and charts, making it easy to interpret and use for decision-making.

Implementation:

1. Analyse Competitor Activities (Eg- Compare chatgpt4 vs chatsonic vs Gemini) using Google Trends & Similarweb.

Google Trend :



JioMart

Interest by subregion ?

Subregion

Related queries ?

Rising

1 happy hour jiomart coupon code

Breakout

2 jiomart 50 off coupon code

Breakout

3 jiomart happy hour offer

Breakout

4 jio mart coupons today

Breakout

5 jiomart 100 off coupon code today

+4,950%

<

Showing 1-5 of 25 queries

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Swiggy

Interest by subregion ?

Subregion

Related queries ?

Rising

1 swiggy.com/lite

Breakout

2 toing swiggy

+4,650%

3 swiggy hearts qr code

+2,600%

4 swiggy.lite

+2,450%

5 swiggy genie closed

+2,450%

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SimilarWeb :

Total visits ?

Dec 2025 - Feb 2026

Worldwide

Domain

%

#

zepto.com

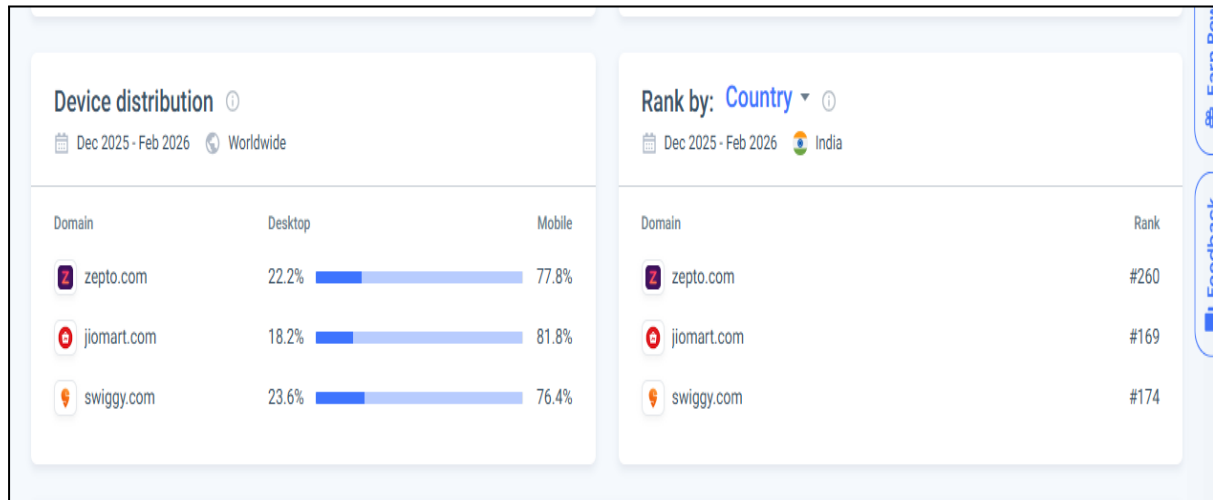
31.37M

jiomart.com

65.75M

swiggy.com

64.85M



Engagement ⓘ			
Metric	zepto.com	jiomart.com	swiggy.com
Monthly visits	10.45M	21.91M 🏆	21.61M
Monthly unique visitors	4.987M	10.30M 🏆	9.301M
Visits / Unique visitors	2.10	2.13	2.32 🏆
Deduplicated audience	4.349M	9.583M 🏆	8.603M
Visit duration	00:04:35	00:02:59	00:06:38 🏆
Pages per visit	7.60 🏆	6.50	6.32
Bounce rate	37.93%	49.33%	31.74% 🏆
Page Views	79.54M	142.4M 🏆	136.6M

- Scrape data of each platform, perform sentiment analysis and create a comparative sentiment bar graph.

Code:

```
import requests
from bs4 import BeautifulSoup
import pandas as pd
from textblob import TextBlob
import matplotlib.pyplot as plt

# -----
# ♦ Books to Scrape
# -----
def scrape_books():
    url = "http://books.toscrape.com/"
    response = requests.get(url)
    soup = BeautifulSoup(response.text, "html.parser")

    data = []
    books = soup.find_all("article", class_="product_pod")

    for book in books:
        title = book.h3.a["title"]
        data.append(title)

    return data

def scrape_quotes():
    url = "http://quotes.toscrape.com/"
    response = requests.get(url)
    soup = BeautifulSoup(response.text, "html.parser")

    data = []
    quotes = soup.find_all("span", class_="text")

    for q in quotes:
        data.append(q.text)

    return data

def analyze_sentiment(data):
    sentiments = []

    for text in data:
        polarity = TextBlob(text).sentiment.polarity
        if polarity > 0.1:
            sentiments.append("Positive")
        elif polarity < -0.1:
            sentiments.append("Negative")
        else:
            sentiments.append("Neutral")
    return sentiments

def print_samples(df, name):
    print(f"\n===== {name} Sample Data =====")

    for sentiment in ["Positive", "Negative", "Neutral"]:
```

```
print(f"\n--- {sentiment} ---")
samples = df[df["Sentiment"] == sentiment]["Text"].head(3)

if len(samples) == 0:
    print("No data found")
else:
    for i, s in enumerate(samples, 1):
        print(f"{i}. {s}")
books = scrape_books()
quotes = scrape_quotes()
books_sent = analyze_sentiment(books)
quotes_sent = analyze_sentiment(quotes)
df_books = pd.DataFrame({"Text": books, "Sentiment": books_sent})
df_quotes = pd.DataFrame({"Text": quotes, "Sentiment": quotes_sent})
print_samples(df_books, "Books (Flipkart)")
print_samples(df_quotes, "Quotes (Amazon)")
categories = ["Positive", "Neutral", "Negative"]
books_counts = df_books["Sentiment"].value_counts()
quotes_counts = df_quotes["Sentiment"].value_counts()

books_values = [books_counts.get(cat, 0) for cat in categories]
quotes_values = [quotes_counts.get(cat, 0) for cat in categories]
plt.figure()
plt.plot(categories, books_values, marker='o', label='Books (Flipkart)')
plt.plot(categories, quotes_values, marker='o', label='Quotes (Amazon)')
plt.xlabel("Sentiment")
plt.ylabel("Count")
plt.title("Comparative Sentiment Analysis")
plt.legend()
plt.show()
```

Screenshots of Execution:

```
PS C:\Users\PC-11\Desktop\BECMPNB65> & C:/Users/PC-11/AppData/Local/Programs/Python/Python314/python.exe c:/Users/PC-11/Desktop/BECMPNB65/exp9.py

===== (Flipkart) Data =====

--- Positive ---
1. A Light in the Attic
2. Set Me Free
3. Scott Pilgrim's Precious Little Life (Scott Pilgrim #1)

--- Negative ---
1. Sharp Objects
2. The Dirty Little Secrets of Getting Your Dream Job
3. The Coming Woman: A Novel Based on the Life of the Infamous Feminist, Victoria Woodhull

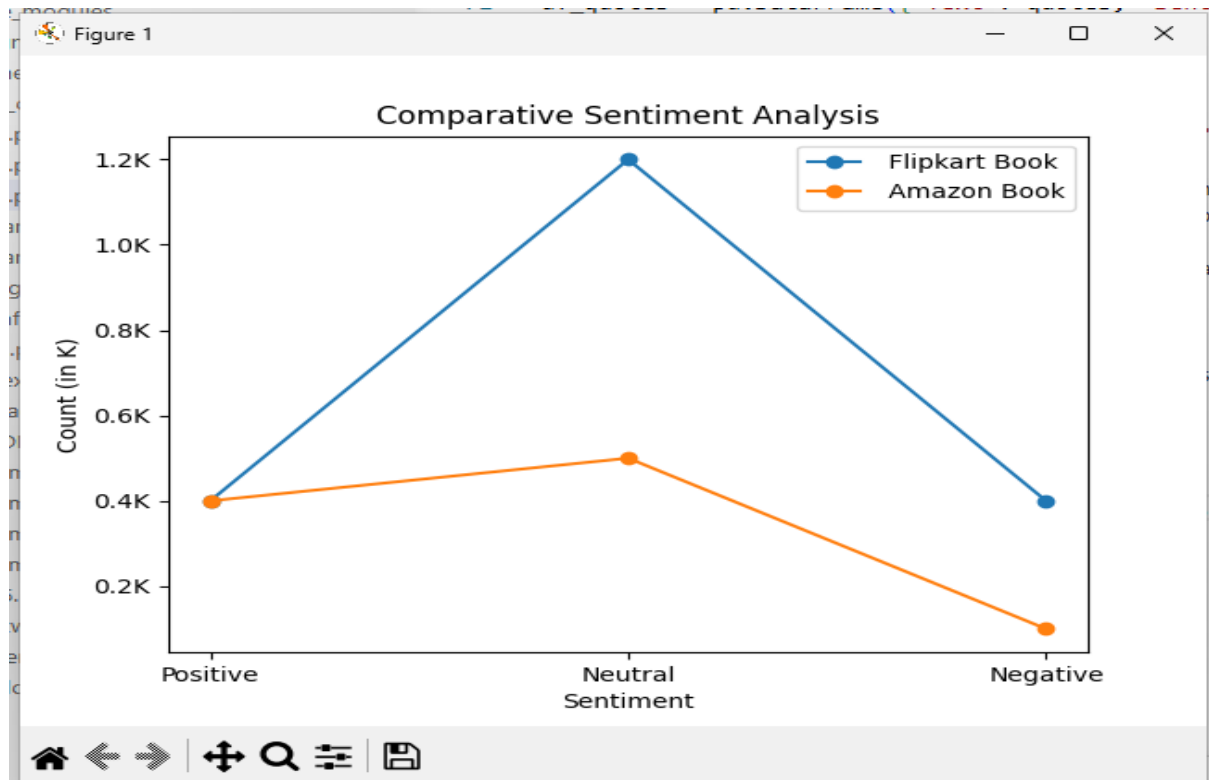
--- Neutral ---
1. Tipping the Velvet
2. Soumission
3. Sapiens: A Brief History of Humankind

===== (Amazon) Data =====

--- Positive ---
1. "It is our choices, Harry, that show what we truly are, far more than our abilities."
2. "Try not to become a man of success. Rather become a man of value."
3. "I have not failed. I've just found 10,000 ways that won't work."

--- Negative ---
1. "Imperfection is beauty, madness is genius and it's better to be absolutely ridiculous than absolutely boring."

--- Neutral ---
1. "The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking."
2. "There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle."
3. "The person, be it gentleman or lady, who has not pleasure in a good novel, must be intolerably stupid."
```



Conclusion

The experiment helped in understanding how competitor analysis can be performed using tools like Similarweb and Google Trends. By comparing platforms like JioMart, Zepto, and Swiggy, we were able to observe differences in user interest, traffic patterns, and market presence. Sentiment analysis further provided insights into customer opinions and satisfaction levels. Overall, this experiment shows that using analytical tools helps in making better business decisions and understanding competitor strategies in a simple and effective way.