
SENTIMENT ANALYSIS FOR MARKETING

INTRODUCTION

In this article, we define sentiment analysis in marketing, describe its benefits and offer tips to help you incorporate it into your team's marketing plan by using python.

ABSTRACT

Parsing online feedback can be a challenging task for any business with a strong social presence. In marketing, sentiment analysis can be useful for teams that want to examine commentary about their brands from a qualitative angle. By looking at the tone and content of social sentiments, you can develop enhanced metrics that may offer more valuable insight.

DESCRIPTION:

SENTIMENT ANALYSIS

Sentiment analysis is a method to analyze texts and determine the sentiment, tone, or opinion behind those texts. The technology behind it is natural language processing (or NLP) and machine learning algorithms.

In digital marketing, sentiment analysis has several important uses such as:

- Customer Campaign feedback analysis
- Brand monitoring
- analysis
- Market reset

REQUIREMENT OF SENTIMENT ANALYSIS USING PYTHON:

- **REQUEST**– This library makes an HTTP connection with the webpage. It helps us to extract the raw HTML (HyperText Markup Language) from it.

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- **BEAUTIFULSOUP** - This is a powerful web scraping or data parsing library. It extracts data out of the raw HTML we get using the requests library. It's also here where we extract the text for sentiment analysis.
 - **VADARSENTIMENT**- VADER, also known as Valence Aware Dictionary and Sentiment Reasoner, is a sentiment analyzer based on rules, which has undergone training using text data from social media.
 - **PANDAS**—This is a library that manipulates data structures. It turns raw unstructured data to spreadsheet-like data structure for readability. Best used for data analysis

SENTIMENTED ANALYSIS USING PYTHON

Create a Python file in a folder where you will write the code. For this guide, Python is the programming language. I recommend using Jupyter notebook. You may use any text editor like Visual Studio Code or Atom if you prefer.

COMPLETE CODE

```

im_all("div",{"class":"reviews-content"})[1] reviewdata =
fulldivcontainer.find_all("span",{"data-hook":"review-body"}) data_dictionary = {} sentiment =
SentimentIntensityAnalyzer() review_list = [] negative_list = [] neutral_list = [] positive_list =
[] compound_list = [] for x in range(0,10): sentiments port requests from bs4 import
BeautifulSoup from vaderSentiment.vaderSentiment import SentimentIntensityAnalyzer import
pandas as pd target_url = 'https://www.amazon.com/Apple-MacBook-Laptop-12-core-19-
core/product-reviews/B0BSHF7WHW/' headers={"accept-language": "en-US,en;q=0.9",
"accept-encoding": "gzip, deflate, br", "User-Agent":"Mozilla/5.0 (Windows NT 10.0; Win64;
x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/111.0.0.0 Safari/537.36"} response =
requests.get(target_url, verify=False, headers=headers) soup = BeautifulSoup(response.text,
'html.parser') fulldivcontainer = soup.find=
sentiment.polarity_scores(data_dictionary["review{}".format(x+1)])
review_list.append("Review {}".format(x+1)) negative_list.append(round(sentiments['neg'],
2)) neutral_list.append(round(sentiments['neu'], 2))

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```
positive_list.append(round(sentiments['pos'], 2))
compound_list.append(round(sentiments['compound'], 2)) data = zip(negative_list,
neutral_list, positive_list, compound_list) df = pd.DataFrame(data, index=review_list)
df.columns = ["Negative Score", "Neutral Score", "Positive Score", "Compound Score"]
print(df) for i in range(0,len(reviewdata)):
data_dictionary["review{ } ".format(i+1 )]=reviewdata[i].text
```

The code imports the necessary libraries:

- requests for sending HTTP requests to the target URL.
- BeautifulSoup for parsing HTML and extracting data from it.
- SentimentIntensityAnalyzer from vaderSentiment.vaderSentiment for sentiment analysis.
- pandas to create a DataFrame later on.

Conclusion:

In this tutorial, we saw how data can be scraped and analyzed. With various Python packages, this task was implemented with ease. With growing economies, it becomes very crucial for companies to keep track of their reviews. One slight mistake can make their image negative.