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## **"DMSENTIMENT"**

# NATURAL LANGUAGE PROCESSING FOR

### SOCIAL MEDIA MARKETING

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#### Abstract

Social media platforms are widely used for digital marketing purposes since there are billions of active users worldwide. In every platform, mainly there are two categories of user types such as private profiles and business pages. People use private profiles to connect with friends, follow brands and stay informed. Business pages are used to promote, post updates and maintain social appearance but for new businesses like startups, conducting a marketing campaign on social media platforms is a nightmare because of the large number of comments they receive. Each and every comment can lead to a sale but if the business is not able to communicate with the potential customers it could be damaging the reputation of the business along with the financial losses.

As a solution to this practical issue, a system is introduced to read though all the comments and categorize them under strengths, weaknesses, opportunities and threats to speed up the workflow. Calculating the polarity of the comments will be done in a hybrid approach in sentiment analysis and categorizing comments into predefined topics will be done using supervised machine learning approach in text classification. Ultimately, ensemble learning methods are used to enhance the machine learning predictions.

#### **Keywords:**

Social computing, Artificial intelligence, Natural language processing, Sentiment analysis, Machine learning, Text mining