

Paper title: Towards Sentiment analysis: A powerful technique for data analytics

Paper link: <https://ieeexplore.ieee.org/document/9156068>

1 Summary

1.1 Motivation

The importance of sentiment analysis as a powerful method in the field of data analytics is examined in this research. It emphasizes how crucial it is becoming to comprehend sentiment in textual data, particularly in the big data and social media eras where massive volumes of information are produced on a regular basis. The motivation basically lies in the ability to use sentiment analysis to uncover insightful patterns and insights that help researchers and organizations make well-informed decisions based on public opinion.

1.2 Contribution

The main contribution is to highlight sentiment analysis's potential as a potent instrument for gleaning important information from textual data. It highlights sentiment analysis's potential influence on decision-making processes and explores its many uses, from political campaigns to commercial strategies. Additionally, the study makes a contribution by offering a thorough summary of the approaches and strategies currently used in sentiment analysis, laying the groundwork for future studies in the area.

1.3 Methodology

This study examines and summarizes current sentiment analysis approaches, from classical machine learning techniques to the most recent developments in deep learning and natural language processing. It explores the difficulties that come with sentiment analysis, like sarcasm and context ambiguity, and how contemporary methods deal with these problems. The methodology section offers guidance to academics and practitioners on how to choose suitable tools and procedures according to the particular needs of their applications.

1.4 Conclusion

The report concludes by highlighting sentiment analysis's enormous potential in data analytics. It highlights how crucial it is to keep up the research and innovation in the field in order to take advantage of fresh opportunities and solve new problems. The conclusion emphasizes how sentiment analysis can change a variety of fields and pushes for the inclusion of this method in standard data analytics procedures.

2 Limitations

2.1 Subjectivity and Context Sensitivity: The study discusses sentiment analysis's vulnerability to subjectivity and context sensitivity as one of its limitations. It is difficult to reach universal accuracy in sentiment interpretation because it frequently varies throughout persons and is greatly influenced by the context in which the material is given.

2.2 Handling of Multilingual Texts: The challenge of performing sentiment analysis on multilingual texts has been noted as another constraint. When working with different languages, current methods could have trouble accurately classifying sentiment, hence more study is needed to improve cross-language sentiment analysis skills.

3 Synthesis

The paper provides a comprehensive evaluation of approaches and their applications while making a strong case for the incorporation of sentiment analysis into data analytics. It describes the possible influence of sentiment analysis on decision-making processes in a variety of sectors and emphasizes the necessity for continued research to overcome current constraints. The paper's summary inspires scholars and professionals to use and develop sentiment analysis methods, opening the door to more sophisticated and useful data-driven insights.