

## ExactData Smart Tool For Marketing Analysis

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**Abstract :** Exact Data is a smart tool which helps with meaningful marketing content creation. It helps marketers achieve this by analyzing the text of an advertisement before and after its publication on social media sites like Facebook or Instagram. In our research we focus on four areas of natural language processing (NLP): grammar correction, sentiment analysis, irony detection and advertisement interpretation. Our research has identified a considerable lack of NLP tools for the Polish language, which specifically aid online marketers. In light of this, our research team has set out to create a robust and versatile NLP tool for the Polish language. The primary objective of our research is to develop a tool that can perform a range of language processing tasks in this language, such as sentiment analysis, text classification, text correction and text interpretation. Our team has been working diligently to create a tool that is accurate, reliable, and adaptable to the specific linguistic features of Polish, and that can provide valuable insights for a wide range of marketers needs. In addition to the Polish language version, we are also developing an English version of the tool, which will enable us to expand the reach and impact of our research to a wider audience. Another area of focus in our research involves tackling the challenge of the limited availability of linguistically diverse corpora for non-English languages, which presents a significant barrier in the development of NLP applications. One approach we have been pursuing is the translation of existing English corpora, which would enable us to use the wealth of linguistic resources available in English for other languages. Furthermore, we are looking into other methods, such as gathering language samples from social media platforms. By analyzing the language used in social media posts, we can collect a wide range of data that reflects the unique linguistic characteristics of specific regions and communities, which can then be used to enhance the accuracy and performance of NLP algorithms for non-English languages. In doing so, we hope to broaden the scope and capabilities of NLP applications. Our research focuses on several key NLP techniques including sentiment analysis, text classification, text interpretation and text correction. To ensure that we can achieve the best possible performance for these techniques, we are evaluating and comparing different approaches and strategies for implementing them. We are exploring a range of different methods, including transformers and convolutional neural networks (CNNs), to determine which ones are most effective for different types of NLP tasks. By analyzing the strengths and weaknesses of each approach, we can identify the most effective techniques for specific use cases, and further enhance the performance of our tool. Our research aims to create a tool, which can provide a comprehensive analysis of advertising effectiveness, allowing marketers to identify areas for improvement and optimize their advertising strategies. The results of this study suggest that a smart tool for advertisement analysis can provide valuable insights for businesses seeking to create effective advertising campaigns.

**Keywords :** NLP, AI, IT, language, marketing, analysis

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