

## ABSTRACT

In the present business landscape, effective management of online presence poses a significant challenge. To address this issue, this project proposes the development of a web-based application with comprehensive social media monitoring and analytics capabilities. The increasing importance of online reputation management, coupled with the rapid growth of social media usage, necessitates a solution that empowers businesses to monitor and analyse customer sentiment in real-time. The proposed system features real-time social media monitoring utilizing web scraping and APIs, advanced sentiment analysis employing natural language processing algorithms, influencer identification, brand comparison and report generation based on aggregated data and user-defined parameters. Existing social media monitoring systems often lack robust sentiment analysis functionality and struggle with generating comprehensive reports, hindering businesses from accurately assessing their online reputation and making informed decisions. By incorporating the RoBERTa Model, the system offers advanced sentiment analysis capabilities for text. It also provides customizable report generation tools that empower businesses to gain deeper insights into customer sentiment, proactively manage their online reputation, and make informed, data-driven decisions to improve brand perception and engagement.