Review of: "A Comparative Analysis of Advertising in the 2020 Presidential Elections & Phoenix Mayoral Elections using Natural Language Processing"

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I found the article very useful and of great interest, especially to deepen the use of NLP techniques in the analysis and interpretation of messages. Although the authors mention some mature NLP model algorithms such as decision trees, SVM, ANN, and RNN, finally, to build their model for predicting the extent of the effect of political microtargeting, they use the Recurrent Neural Network (RNN) and Support Vector Machine (SVM) models. Their application of both methods to the comparative analysis of the use of microtargeting to capture the toxicity of political advertising in the 2020 U.S. presidential campaign and the 2020 Phoenix mayoral election is very interesting.

However, there is some difficulty in understanding the comparative analysis they conduct. For example, in the conclusions, they state that "social network advertising presents a valuable resource for targeting specific groups of individuals who are more susceptible to targeted ads." However, it is not found in the text how they have reached this conclusion from the RNN and SVM models. Although they explain very well what they are used for, their advantages and disadvantages, mentioning, for example, the result achieved by both models (0.093 for the RNN or 0.6 accuracy for SVM) when applying them to their research question, it is not entirely clear what kind of result they arrive at.

To facilitate the reading of the article, it would be interesting to establish some general and specific objectives of the work to help the reader understand the type of analysis they have carried out based on the two models. Thus, their initial question "To what extent is political microtargeting used by political advertisers to launch toxic campaign messages?" could become a hypothesis of the work from which to perform an analysis and to specify the steps they take to achieve their ultimate goal, as well as to understand how their results provide information on how microtargeting and its effects on voting behavior in elections. In this way, they would clarify and disseminate the conclusions of their work in which they state "that social network advertising presents a valuable resource for targeting specific groups of individuals who are more susceptible to targeted ads."

This would greatly facilitate the understanding of the manuscript and the authors' work, which raises a topic of interest and the creation of a model that is very useful for the analysis of the degree of toxicity of messages in political campaigns.