Thesis Project Portfolio

Medella

(Technical Report)

Targeted Information (and Misinformation) in Political Advertising

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

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Spring, 2020

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Prospectus

Sociotechnical Synthesis

Insights Into the Future of Targeted Advertising

In the age of social media and other free to use online networks, data collection and targeted advertising have become increasingly pressing issues. As the number of users of these sites continues to grow, so does the concern over their practices of data collection. While this has been great for revenue and connecting people to products they may want, this technology has also been exploited for the distribution of potentially misleading political information. After the Cambridge Analytica scandal in 2016, the issue of using these highly targeted advertising technologies for political advertising has been a pressing issue for the public and the sites that are running these ads. To this end, my STS research took a deeper look at how these social media and other sites behave and their interaction with the political campaign system. On the other hand, this information targeting technology can also be used benevolently, connecting people with products they may love or with information that may be useful to them. My technical project, Medella, aims to connect people with health and wellness information that will significantly benefit their lives through education.

My STS analysis of the use of information targeting technologies for political advertising takes a look at the effectiveness of this technique and the responses to it. After the Cambridge Analytica scandal, not only was there an outcry from the public, but there were also reactions from legislators and even the social media sites themselves. Twitter has already taken a stance against political advertising on its platform, and the EU has already passed more data protection laws. Looking at the trends in campaign spending on these kinds of advertising, it is

imperative that more legislative action is taken in order to keep the integrity of voters and protect the democratic process.

My technical team developed Medella for our customer Grant, who has always wanted to help people live healthier lives. Medella is a platform where users can receive educational health information in the forms of quizzes, videos, blog posts, and newsletters. While for now this content is manually picked and sent out to specific users, the end goal for the system is to have it recognize which concepts users are engaging with the most and in turn be able to send out only the most pertinent information to the users, targeting the users in a similar manner to social media sites. Medella encouraged me to do my STS research on targeted advertising, as it made the benefits and drawbacks to information targeting technology instantly apparent.