Can data on TV watching predict presidential election outcomes?

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A provocative new study shows that big data-derived models developed and trained based on people's television viewing behavior in "safe" U.S. states can be used to forecast the presidential election outcomes in "swing" states. The model design, potential for its use in 2016 and beyond, and implications for the billions of dollars of advertising spent in presidential elections are discussed in an Open Access article published in *Big Data*.

"Does Television Viewership Predict Presidential Election Outcomes?" by Arash Barfar and Balaji Padmanabhan, University of South Florida, Tampa, describes the creation and training of a model using data from the 4 weeks leading up to the 2012 U.S. presidential election. The researchers selected several television programs with political relevance and collected data on minutes watched and percentage of viewers in "safe" states (where election outcomes are assumed), and used that data to train the model to predict the election outcomes in "swing" states (where outcomes are uncertain).

The results showed that 99 television programs had predictive accuracies greater than 59%, and three programs could predict outcomes with an accuracy greater than 79%.

"This very interesting research demonstrates the prediction of election outcomes at the state and county levels based on an analysis of television viewership across the country," says *Big Data* Editor-in-Chief Vasant Dhar, Professor at the Stern School of Business, New York University.

"The results from the predictive model provide useful insights into some of the major drivers that drove 2012 election results. It will be very interesting to see the model applied to the 2016 elections."

More information: Arash Barfar et al. Does Television Viewership Predict Presidential Election Outcomes?, *Big Data* (2015). DOI: 10.1089/big.2015.0008

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