

ASSIGNING VOTERS INTO FUZZY CLUSTERS
USING FUZZY ANALYSIS

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ABSTRACT

This paper explores the feasibility of using fuzzy analysis in the clustering of data. Fuzzy analysis allots each object a degree of membership to each cluster. The study used data from a survey of potential voters coming into the 2007 national elections. Fuzzy clustering was performed to generate the degree of membership of each voter to each cluster. Based on the membership grades, each voter was then assigned a cluster. Each cluster was defined with a distinct profile. Some indeterminate voters – those that do not tend to belong to any of the clusters - were discovered; each one was analyzed, their traits compared to the defined clusters. In comparison to traditional clustering, cluster assignment for the fuzzy and traditional procedures looked fairly similar for the two-cluster solution. For the three-cluster solution, some dissimilarities in the assignment were observed.