## The impact of candidates' profile and campaign decisions in electoral results: A data analytics approach

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## Abstract

In recent years, a wide range of techniques has been developed to predict electoral results and to measure the influence of different factors in these results. In this paper, we analyze the influence of the political profile of candidates (characterized by personal and political features) and their campaign effort (characterized by electoral expenditure and by territorial deployment strategies retrieved from social networks activity) on the electoral results. This analysis is carried out by using three of the most frequent data analyitcs algorithms in the literature. For our analysis, we consider the 2017 Parliamentary elections in Chile, which are the first elections after a major reform of the electoral system, that encompassed a transition from a binomial to a proportional system, a modification of the districts' structure, an increase in the number of seats, and the requirement of gender parity in the lists of the different coalitions. The obtained results reveal that, regardless of the political coalition, the electoral experience of candidates, in particular in the same seat they are running for (even when the corresponding district is modified), is by large the most influential factor to explain the electoral results. However, the attained results show that the influence of other features, such as campaign expenditures, depends on the political coalition. Additionally, by means of a simulation procedure, we show how different levels of territorial deployment efforts might impact on the results of candidates. This procedure could be used by parties and coalitions when planning their campaign strategies.

Author keywords
Campaign efforts
Candidate profiles
Chilean parliamentary election
Territorial deployment