

**A Project Work On**

# **Game Theory Applications in Marketing**

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## INDIAN POLITICS: THE ULTIMATE GAME AND GAME CHANGER

India is all set to witness the heat of elections in a couple of months. Tarun, a native of Kochi, is pondering over the newspaper headline that caught his attention- "Party or person? What's your pick?" The article talked about the dilemma faced by a voter when there are no good candidates to represent a good party and the good candidate actually represents a not-so-good party. The voter has to choose a tradeoff here-either vote for the good candidate which might bring a not-so-good party at the center, or vote for the good party at the risk of a bad candidate representing your constituency.

Tarun wondered what his choice would be.

The election ground was all set for the battle between 3 national parties- The Democrats, The Republicans and a newly formed Peoples Party. The article detailed in length the conception and growth of all these parties.

The Democrats is the oldest national party, conceived nearly five decades back. Though it has a rich legacy to boast of, recent events have charred its image. As per the survey conducted by the paper (which most politicians believe to be reliable if not accurate), the chances that the party would win at the center is only 40%.

The Republicans is the toughest competitor of the Democrats. Though its chances of winning at the center is as high as 50%, it faced problems in getting good local candidates, especially in the southern states where the Democrats has a clear hold. Most of the constituencies towards the south are in favor of the Democrats and the candidates it has chosen enjoy good public support. The Republicans wondered if this can be overtaken by the public outrage against the party.

Though it's a new party, People's Party is also all set to turn the election in its favor. It has also managed to get really influential people in all constituencies to endorse for the party. In fact the candidates who are going to represent People's Party enjoy a higher support than the candidates of the Republicans in most constituencies where it is contesting.

The ultimate question was whether the voter would choose the better party for the sake of his country, or the better candidate for the sake of his constituency.

Tarun decided to evaluate all his choices and take a rational decision. He decided to assign scores to all parties and to all candidates. He read about all parties in detail and decided to weigh all parties out of 100. The Democrats was assigned a weightage of 30, the Republicans 50, and the rest was assigned to the People's Party.

As per the speculations, the candidate chosen by the Democrats is Dr. Stephen Jose, who has been winning the constituency for years now. He's a renowned candidate, who is rumored to have a 50% chance of winning the constituency. Tarun gave Dr. Jose a weightage of 50.

People's Party is assumed to be represented by Mr. Jaydev, who's a widely known philanthropist. He is a very influential person in the constituency and is contesting in an election for the first time. Tarun didn't think twice to give him a weightage of 30.

Meanwhile the Republicans are planning to choose Mr. Prasad to contest against Dr. Jose. Though Mr. Prasad doesn't have any track records to his credit, the party believes it can cash upon the disappointment of the public over the Democrats to the advantage of Mr. Prasad. The remaining weightage was assigned to him though Tarun wondered if Mr. Prasad deserved it. The chance of him winning was a mere 20%.

He decided to add the weightage at the constituency and at the center for each option and arrive at the final pay off.

Tarun also give a thought about the "combination effect" that would come into play if the person who wins at the constituency is supported by his own party at the center. Thus he decided to give an extra 10 if the person winning at the constituency is backed by his own party at the center. But the rivalry between the Republicans and the Democrats is well known. He knew a Democrat candidate wouldn't get much support if it's Republicans at the center. He decided to deduct 10 from the total payoff for Democrats-Republicans combination.

Assuming all votes in the constituency would be split between Dr. Jose, Mr. Prasad and Mr. Jaydev, and assuming all seats at the center would be split between the Democrats, the Republicans and the People's Party, whom should Tarun vote for?