How To Win the Superbowl: Historical Overview

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Project Description:

Our project is based on Superbowl statistics gathered over the past 53 years. We want to tell the story of the Superbowl: where it’s been held, how many people were present (physically/remotely), how each teams’ performance may have determined whether they won their game, and how each team’s score per quarter may give them a higher probability of winning the game.

**Research Questions to Answer:**

* What are noticeable trends with respect to the increase/decrease of attendees/viewers of the Superbowl?
* What do the various locations of the Superbowl tell us about how football has evolved over time?
* What combination of scores per quarter gives a team a higher probability of winning?
* Is it true all Superbowl wins are “blowouts”?
* Injuries: did the MVP get injured? QB injured? Did this determine whether the projected winner won/underdog won?
* Does the team with a higher success rate (measured by % pass completion) win?

**Datasets to be Used:**

We will be using a csv file which contains the historical information needed to make our calculations. Another csv file of the 49ers and Chiefs’ overall season may also be used for forecasting purposes.

**Rough Breakdown of Tasks:**

* Geographic Data
  + Mapping where each Superbowl for the past 53 years took place
  + Tracking attendance (people in stadium vs number of overall viewers)
  + Home-field/regional advantage? It’s effect on attendance
* Numerical Data
  + “Squares” – showing the probability of a team winning the game based on what the score is each quarter
  + Finding outliers…are they the underdogs?
* Statistical Data
  + Superbowl Blowouts –Define what we consider a blowout
  + Calculating the correlation between pass completions and whether the team with the highest “success” rate won the game that year (using standard deviations)
  + If the underdog won, where did they fall on the pass completion chart? How did they perform/did they fulfill expectations of “success”?