Major League Soccer – Ball Possession

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Goals

Goals:

- Analyze correlation between ball possession and other statistics commonly used in soccer
- Does ball possession influence the outcome of a game?
- Are teams with higher ball possession more successful?

Tools used:

- Excel
- Python
- BeautifulSoup (web scraping)
- PowerBI

What is ball possession and how is it measured?

- Calculating ball possession by a manual clock - A person responsible for it has to start measuring the time when a player of a given time began to possess the ball and to stop the clock when the team lost the ball.
- Measuring ball possession by calculating passes - summing up the numbers of passes of one team during the match and dividing it by the number of total passes made by both teams but it doesn’t include the time when players were on the ball.
- The newest way to measure ball possession - ball possession is measured by three people who are using video-based data collection tools during a match.

My method

Limitations in time and resources, such as people measuring the time people are on the ball for each MLS game of 2021, didn't allow me to get exact times and pass success rates.

I analyzed if a team's ball possession has a positive or negative outcome for a game or if it has any influence on the outcome at all.

Another difficulty was that players who got traded during the season had passing success rates for the 2021 season total passes, but not for each team they played with.

This led me to use the team ball possession and team total passes to analyze the overall impact on a game of ball possession and high passing rates.

Data Acquisition and Cleaning