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6-10-13

WInning in the NBA

With the NBA season coming to a close, I thought it would be interesting to examine what it takes to win basketball games at the professional level. I will be examining professional basketball through statistical analysis of the most important aspects of the game that separate winners from losers.

Dean Oliver, a prominent basketball statistician, devised what he calls the "Four Factors of Basketball Success." The factors he considers to be most important to winning are shooting, turnovers, rebounding, and free throws. Statistics representing these four basketball factors are what I chose to use in examining what it takes to win basketball games. My program uses statistics from the 2012-2013 NBA season I pulled from stats.nba.com. Using this data, my program weighs the importance of each of the "Four Factors" based on season averages for each team. Depending on certain trends in the NBA, the importance of the "Four Factors" may change. The code will accommodate for change in trends, however, because the factors are weighed with respect to how much they correlate to trends in winning. Because the program is based on trends in gameplay for a single season, it is important to have sufficient data available. For example, data could be gathered after the first 20 games of the NBA season and implemented into this program to predict the full record out of an 82-game season. A team could then look at the results and then know what of the factors they can focus on to hopefully improve their record.

To win basketball games, teams must play a game according to bettering the strategy of one's opponent. This program takes a look at the average opponent for the season and determines how important to winning each of the "four factors" are.

References:

http://stats.nba.com

"Basketball on Paper", Dean Oliver