A General Manager's Dilemma

Every off season, the time between the end of the playoffs and the start of the subsequent season, teams need to decide what to do with their players. Do they re-sign them? Give them a contract extension? Trade them off for a player more worth their money? There are many choices that a team can make, but it is up to the General Manager, GM for short, to make weigh these choices and figure out which direction is the best course of action for the team.

In the off season before the 2018-2019 season, Koby Altman, GM of the Cleveland Cavaliers had a difficult decision to make. He has to choose what to do with Kevin Love, now that LeBron James decided to take his talents to the sunny beaches of Los Angeles.

Throughout the 4 years that Kevin Love has been a Cavalier, Kevin Love saw a noticeable dip in production compared to his days in Minnesota., averaged 17.6 points per game, 9.3 rebounds, and 1.7 assists, but he also turned the ball over 1.5 times. He also provided the team with 6.4 Win Shares. These stats, though impressive for the second-man on the team, are very low compared to his days in Minnesota. The year before he came to Cleveland, he average 26.1 points per game and 12.5 rebounds per game, with an astonishing 14.3 Win Shares contributed to the team. At the time, it was a no brainer to sign the big man with a 5 year \$110,000,000 contract, but with one year left, should Koby Altman bother re-signing him?

It all depends on if Kevin Love is still worth the money he gives to the team, and how much he is asking for. Turns out, he is asking for a pay *increase* valued at \$120,000,000 over 4 years. This averages to around \$30,000,000 per year. Is Kevin Love still worth this type of

money? We also need to take into account his days as the number one player on the team, since LeBron has left the team and provides Love with an opening to increase his stats.

Through some Exploratory Data Analysis, I have found that the statistics that have the strongest correlation to salary are Win Shares, points per game, rebounds, and minutes played per game. The slopes for each of these stats compared to their 2018-2019 salary are \$1,712,118 per WS, \$879,358 per PPG, \$1,600,000 per RPG, and \$565,000 per minute played per game. If you multiply his averages by these slopes, you attain, \$11,000,000, \$15,476,700, \$14,880,000, and \$15,820,000 respectively. Looking strictly at his previous years stats, it is evident that he is only worth around 14 or 15 million dollars. But we must remember that LeBron James is leaving the team and that Kevin Love will now be the face of the team like he was in Minnesota. To try and see how much he would be worth if he brought his stats from Minnesota back, I will multiply his stats from his last year in Minnesota by these slopes. I get \$24,483,287, \$22,951,243, \$27,000,000 and \$20,509,000 respectively. As you can see, these stats provide a number that is *much* closer to his asking price of \$30,000,000. The way NBA salaries work as well is that the first year in the contract pays the least amount of money, and it slowly increases by the last year, so more realistically, his first year on the contract will only pay Kevin Love around \$25,000,000.

This number of \$25,000,000 for the next season is well in line with the stats that Kevin Love provided his team before he came to the Cavaliers, and Koby Altman must realize this, because he decided that Kevin Love was worth the contract extension. I guess now we will have to wait and see if Kevin Love can recapture the old days and play like his money's worth.