DSC530: Final Project

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DSC530: Exploratory Data Analysis

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The dataset that I chose to do exploratory data analysis on had to do with shot selection in the NBA. It comprised of each individual shot taken in the NBA season, who took the shot, the timing of the shot, and the outcome. This was a treasure trove of data, and naturally I had a lot of questions. The questions that jumped off the page to me initially were how the shot clock number affected the likelihood of the shot going in. Did shots taken earlier in the possession have a higher likelihood of going in, or the opposite?

The outcome was slightly disappointing – as my initial question was answered with an unsatisfying no contest. Basically, it did not matter when the shot was taken in the shot clock, it did not heavily affect the outcome of the shot itself. When it comes to items I may have missed during the EDA, I am sure there were plenty. I could have created histograms for each individual variable instead of just five, and I could have created more scatterplots for comparison. However, staying with the parameters of the project was important to me. So, in that way, I may have missed some relationships between variables. A variable that I wish I had was the shooter’s field goal percentage on the season. That way, I could get an idea of the likelihood of the shot going in before factoring in any of the variables.

I do not necessarily think I made any false assumptions; however, I may have come to some false conclusions given the lack of data. There are confounding variables involved that held back the analysis and prevented me from arriving at a one hundred percent accurate assessment. A lot of the challenges I faced just had to do with my lack of experience doing this kind of project. The general methodology of laying out a project of this size and scope was previously unknown to me, so there were some growing pains there. Overall, it was a very engaging introductory analysis project, and I am looking forward to using my skills to build for the future.