

1. **Executive Summary.** I am very interested in the topic of how to find and identify the right basketball players for a specific NBA team. It is always challenging to find the right players for the team, because different teams always have their own individual needs for players, in addition to that, the trend of the NBA is constantly changing, some years are more encouraged to defend, some years are more important to attack. We have to evaluate the player's future performance in the team based on his current characters like age and height.
2. **Why.** This business case is about how the NBA Celtics player manager can use data to make better player trades. A possible result might be some graphs showing the important characteristics of players that perform well in the Celtics team.
3. **Who.** The persona file is on the next page.
4. **What.** The dataset is from: <https://www.kaggle.com/datasets/justinas/nba-players-data>
This dataset includes basketball players from 2000 to 2023, including their basic physical characteristics (such as height and weight), nationality, draft information, and their performance in the NBA. From this dataset, we can try to visualize and get some insights into which characteristics are important for players to succeed in the NBA and which players are best suited for specific team, because different teams need different types of players, like some teams lack good offensive players or good assist guards.
5. **How.** Because this business is quite complicated and there are more than 10 player features that might be important for a player's future performance in a specific team, so I plan to create several bar charts, line charts and dashboards to form a story to show all the insights I found in the dataset.
6. **Challenges.** The dataset has more than 20 columns, so we need to thoroughly check the integrity of all columns and remove outliers. In addition, we also need to visualize these columns to determine the impact of different features on different aspects of performance.

Persona: Lee (NBA Celtics Player Manager)

I am interested in any idea of free player internationally trade strategy.

Role: NBA Celtics Player Manager

Age: 46 **Gender:** Male **Education:** Bachelor



Goals:

- Wants fast clear and credible updates
- Wants to find proper basketball player for the Celtics team
- Wishes to find out what will be key features that ensure a player performs good in the NBA

Challenges and Needs:

Lee has been the NBA player manager for several years, he is always trying to find proper players for his team, which means not only the player himself should be talented, but also should perform well, fit the team best and help the entire team perform better. There are many key characters of a player like height and age, he wants to find out what kind of players have higher possibilities to perform good in the future NBA games in his team.

Context:

Monthly board meeting. There are 5 people in the audience looking at a big screen across a small room and also have a printed summary (handouts).

Lee is a aggressive, highly connected board member. He wants to do the best player trades that helps the team most. He wants to reduce the risk of selecting a improper player that might hurt the team's chemistry and performance.