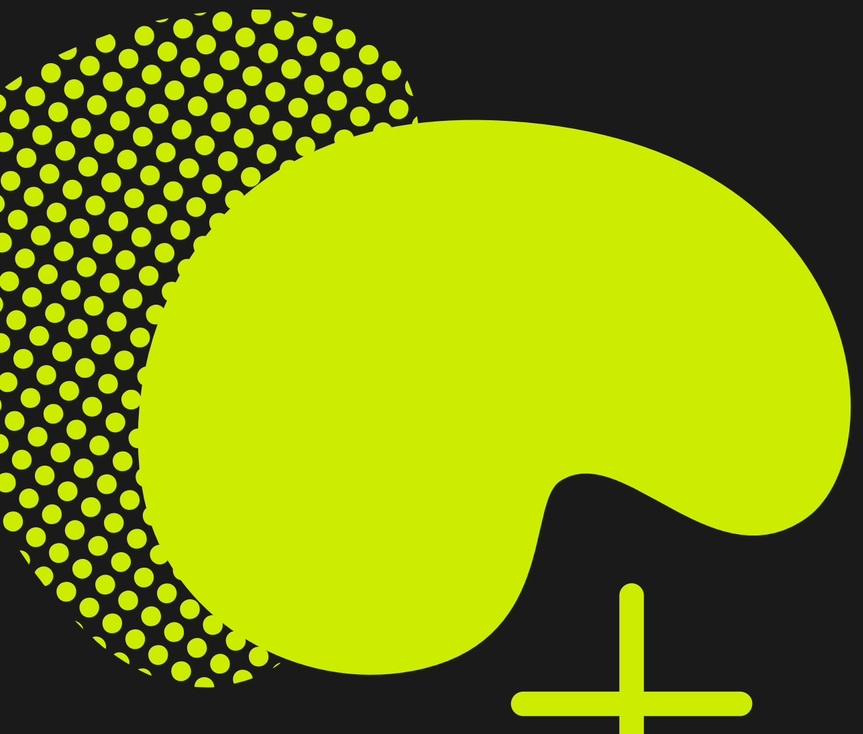
A model based approach to understanding what makes a good team good in the NBA.

OFFENSE VS DEFFENSE

The Business Problem



Teams have finite resources

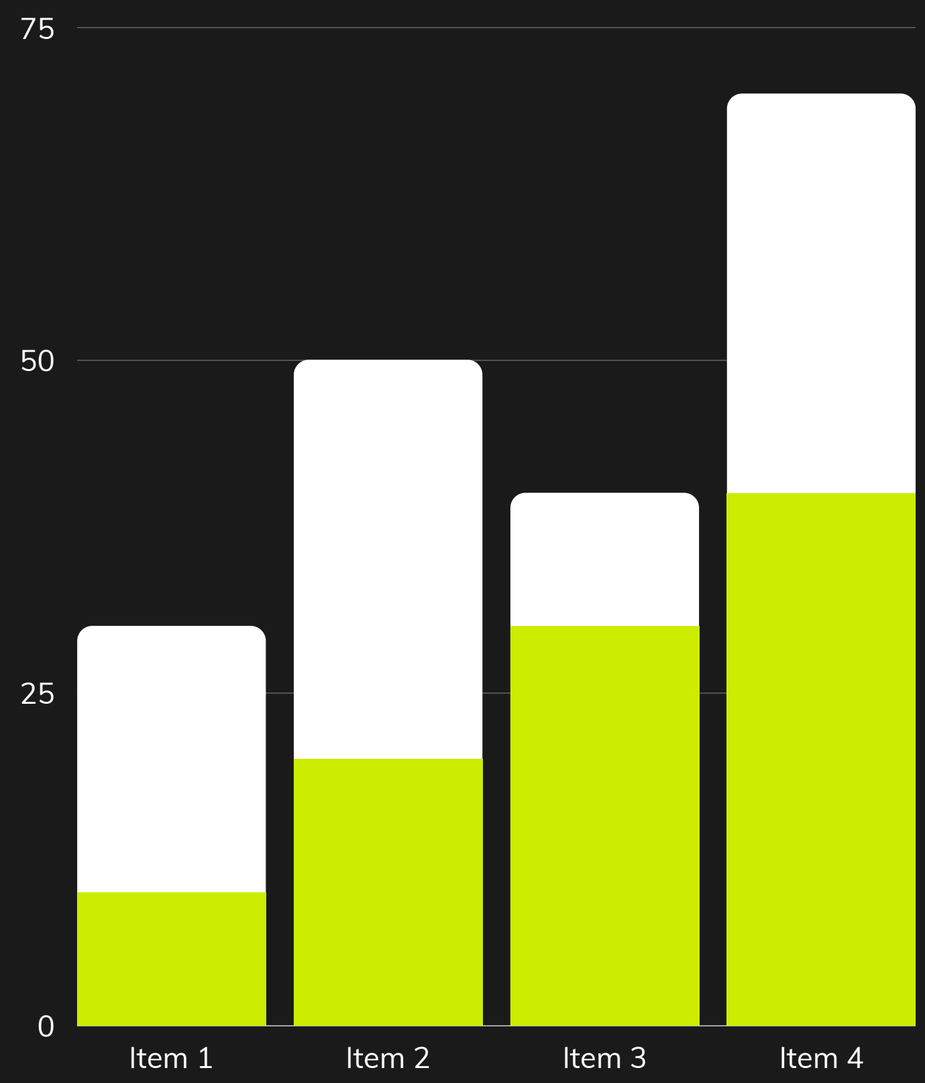
Roster Spots

Playoffs = More Money

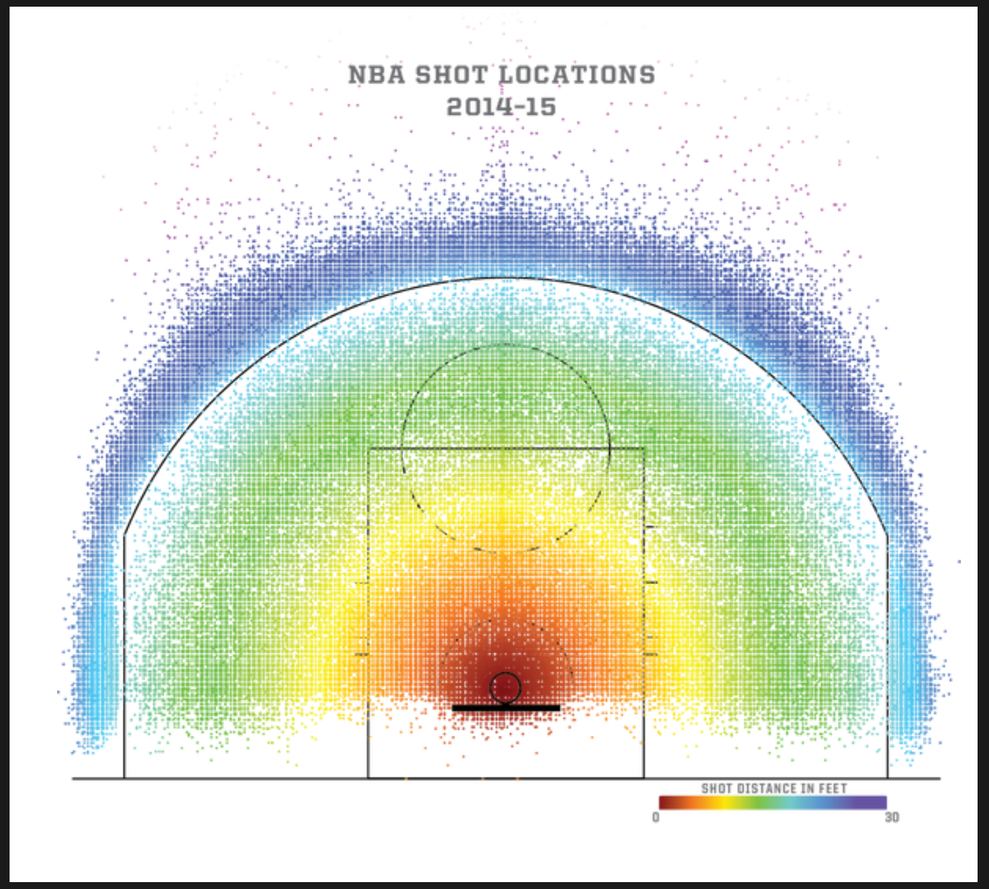
On ticket sales alone in 2012-13 the Heat made 1.44 million per game.

What makes a good team good?

Offense or Deffense for a ticket to the playoffs

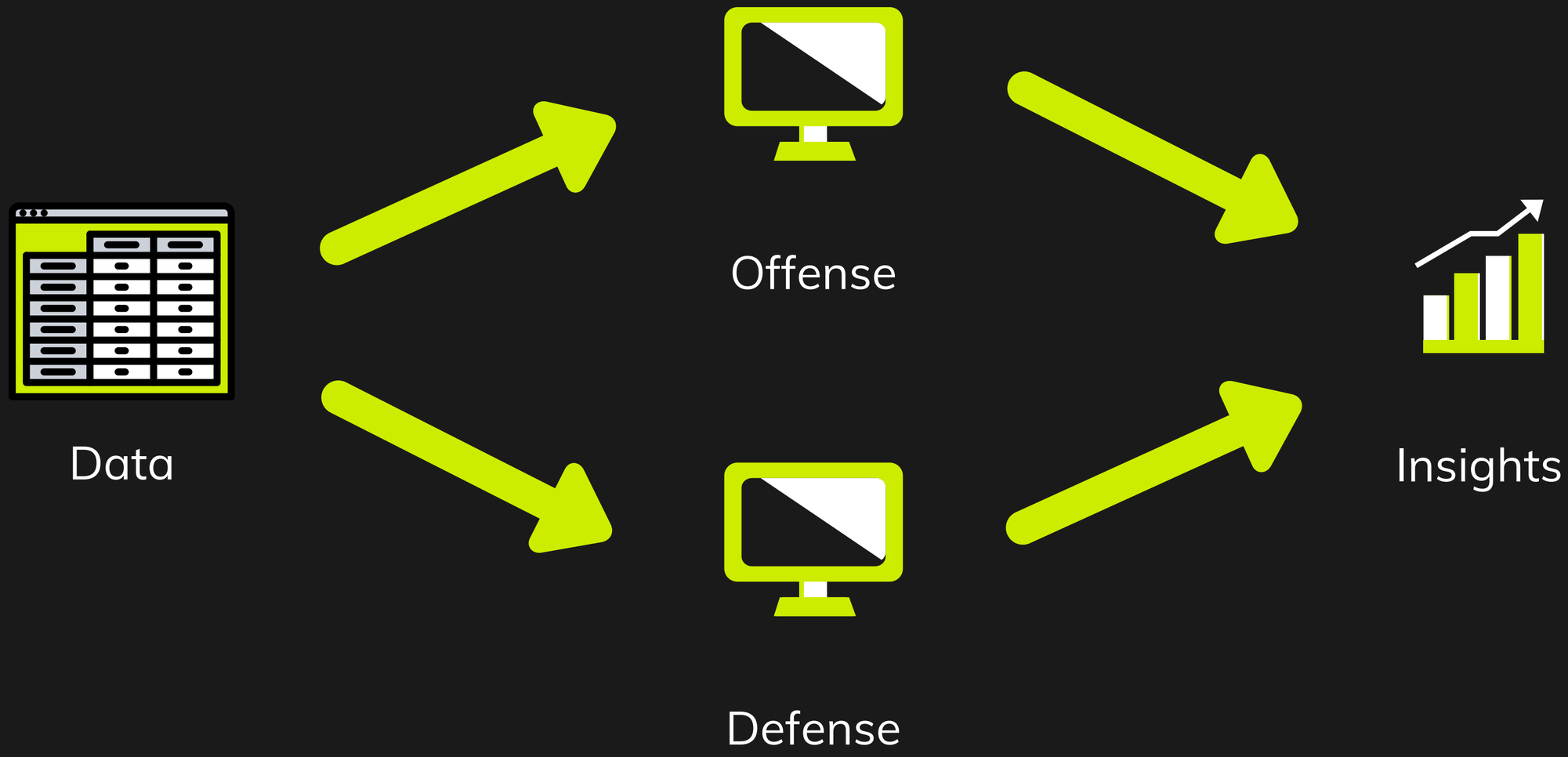


Data, data and more data



Shooting Performance by location for every team since 1997

Reverse Engineering a ML model



Key takeaways:

200%

More likely to miss the playoffs

If midrange is not contained

More than nany other shot aoutside the RA

Key takeaways:

Shot Location Modeling based

Great predictors for team performance

Better indicators than steals, blocks

No clear silver bullet

No model based purely on offense could consistently outperform a model based purely on defensive.

More work is needed on applying models.

Next steps

More Data

Due to shot tracking, only 742 teams were available

More powerful Models

The models used to obtain the results were very basic

Shot distance Instead of zone

Distance instead of shot location

Thank you for listening

Claudio Perez 2021