5 PLUS

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01

Business Problem

Overview:

In 2019 over 3.67 BILLION USD is paid in contracts to players

01

Here at 5 plus want to put our financial resources behind players who'll have long and strong careers

Our job:

We are working with <u>5 Plus</u> to identify young players with the highest likelihood of having a sustained career of five or more years in the NBA

02

Data

We used two datasets from Kaggle

One had 2360 records, the other had 3243 records.

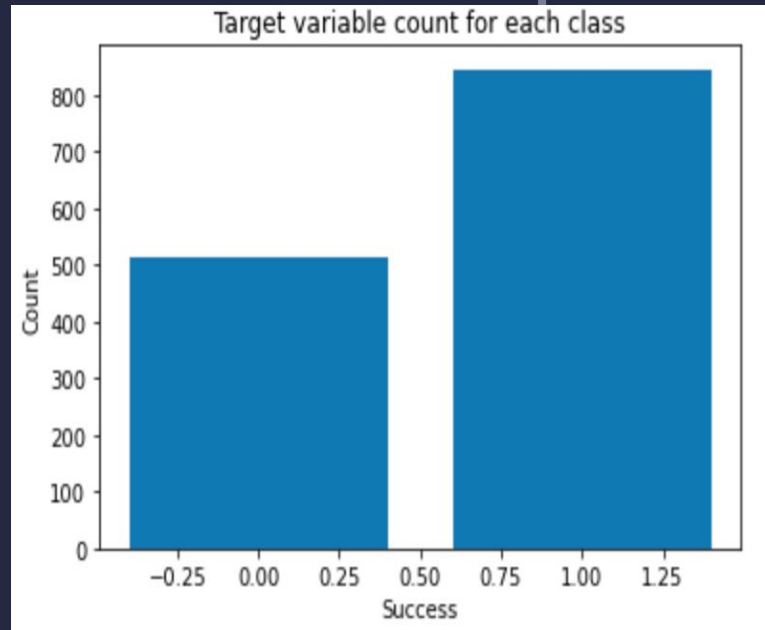17 features, ranging from mean attempts to 3-pt. shots
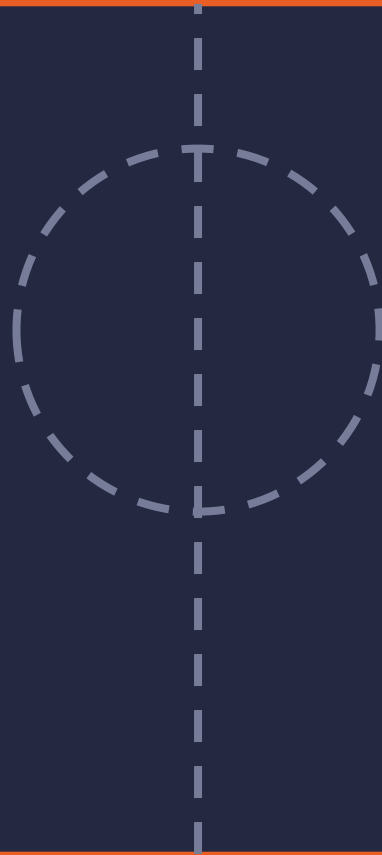
1950-2018

Data Imbalance

Here we can see the data is not balanced in out target variable there is a lot more people who did pass the threshold of 5 plus years than did not.

Therefore we will have to balance this data set.

Target variable count for each class

03
OUR METHOD

Models

- LOG REG
- Estimates the probability of an event occurring, such as voted or didn't vote, based on a given dataset of independent variables.

- DT
- A tree-like structure where each internal tests on attribute, each branch corresponds to attribute value and each leaf node represents the final decision or prediction.

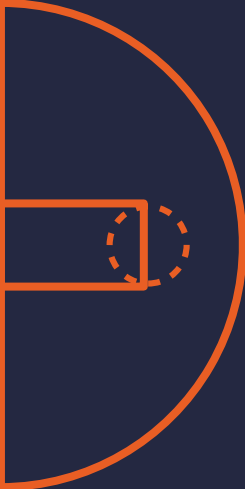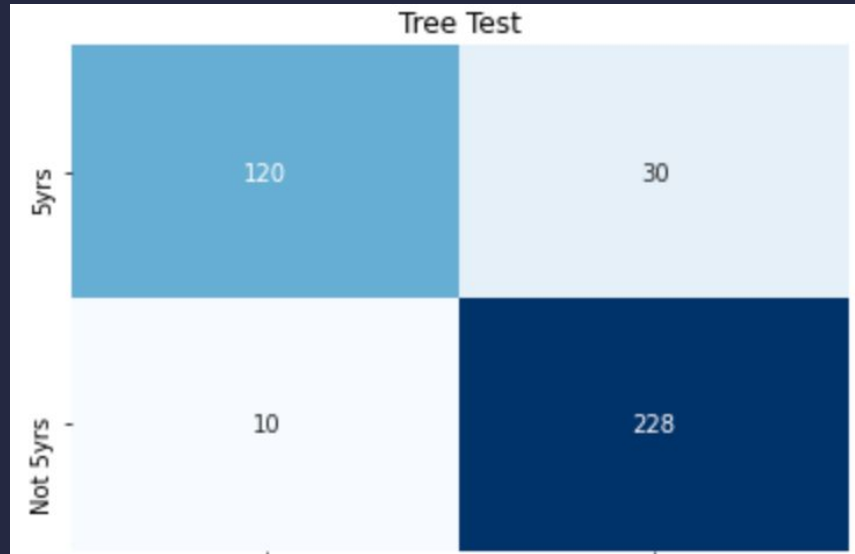# We can see how over fit the DT is…and use that to prune our tree depth
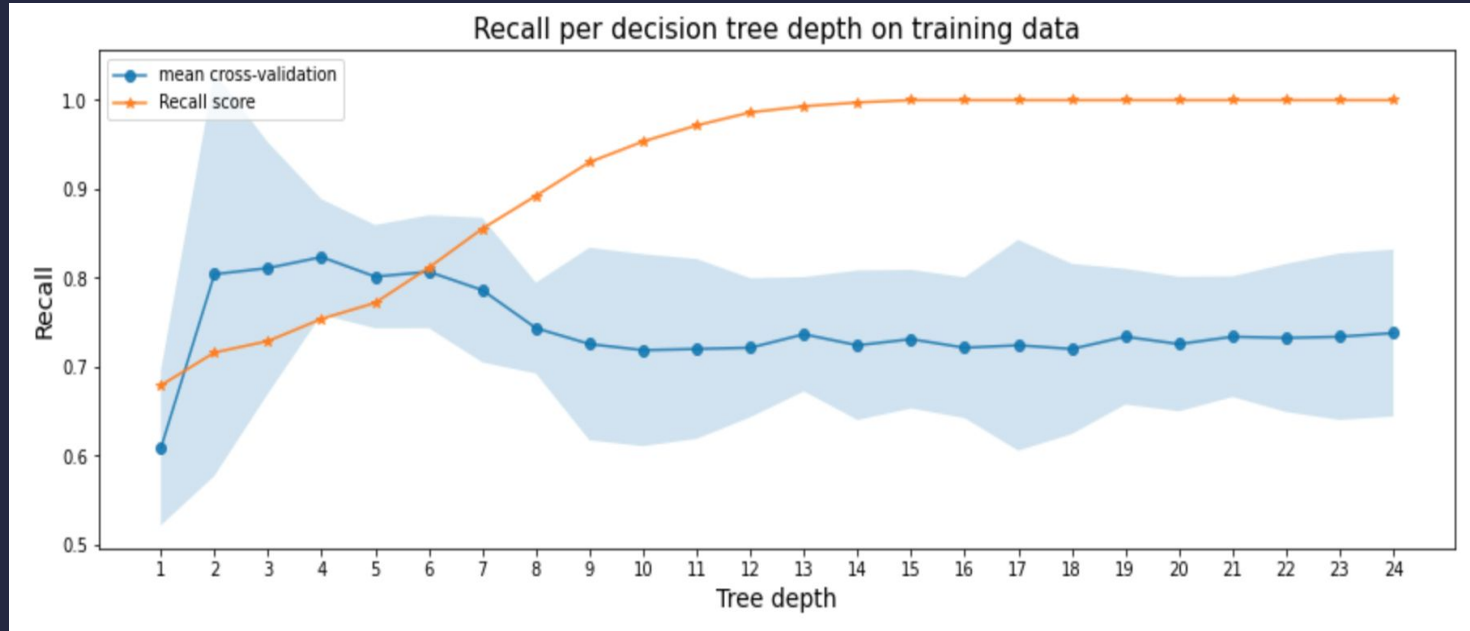
04 Results

Confusion Matrix

Our Decision tree had the best results, with 120 TP (won't last 5 years), and 228 TN (will last 5 years)

Tree Test

	5yrs	Not 5yrs
5yrs	120	30
Not 5yrs	10	228

Recommendations

Slam Dunk

We can predict with a high degree of confidence which players have pro staying power

Big Yes

We recommend using our Decision tree model because of how well it our recall responded.

THANKS

DO YOU HAVE ANY QUESTIONS?

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