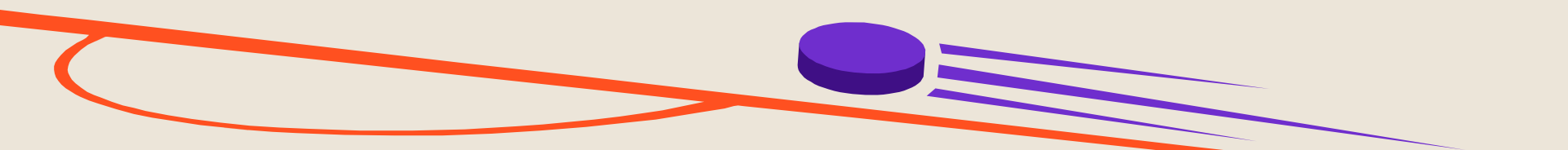




WILL OVECHKIN BREAK THE GOAL RECORD?

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Wharton Moneyball Academy 2024



GAME GLOSSARY



GPG

Goals Per Game



EXPECTED GOALS

Goals the player was predicted to score



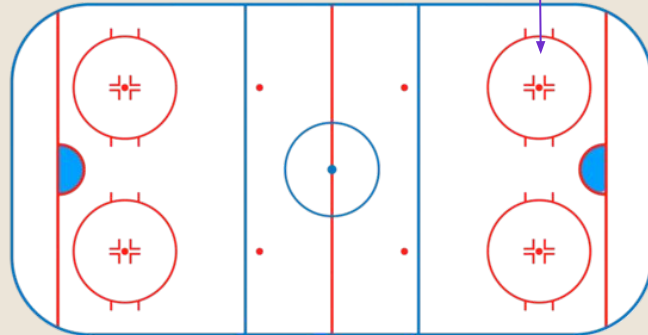
OVI'S OFFICE

The spot he takes his slapshot from most often



SLAPSHOT

A type of shot where the player winds up and “slaps” at the puck



OVECHKIN



- Alexander "Ovi" Ovechkin
 - Currently 38 years old
- Regarded as one of the greatest goal scorers of all time
 - Drafted first overall in 2004
- Currently has **853 career goals**

GRETZKY



- Wayne Gretzky, AKA "The Great One"
 - Was 38 when he retired
- Unanimously considered the greatest player of all time
 - Undrafted, 'rookie' year in 1979
- Holds the NHL record at **894 career goals**



**BUT CAN OVI BREAK
THE RECORD?**



THINGS TO CONSIDER

- Age
 - 38 years old
 - Average NHLer retires in their 30s
- Contract
 - Two years left on his contract
- Declining production
 - Most seasons ~ 0.60 goals per game (GPG)
 - Last year he averaged 0.39 GPG – his career lowest
 - His main skill is still really good .



WHAT WE LOOKED AT

01

AGE DATA

When are people retiring? Will Ovi be able to finish off his contract?

02

YEARLY SCORING DATA

What years was he producing more, and can we use that to predict the next few years?

03

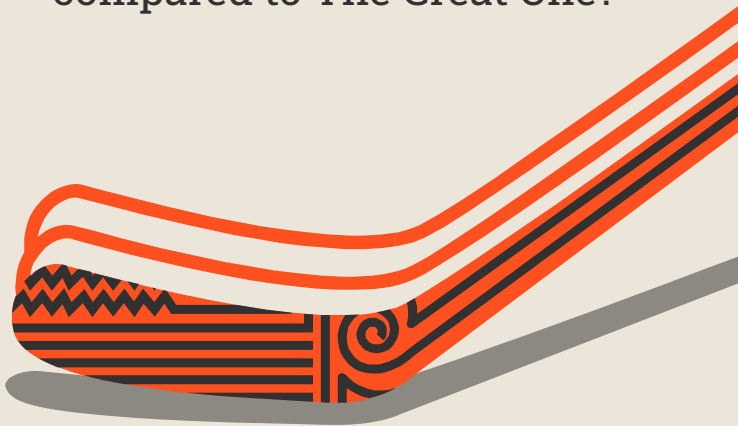
LOCATION TRACKING

Where is he producing more from? Is that changing?

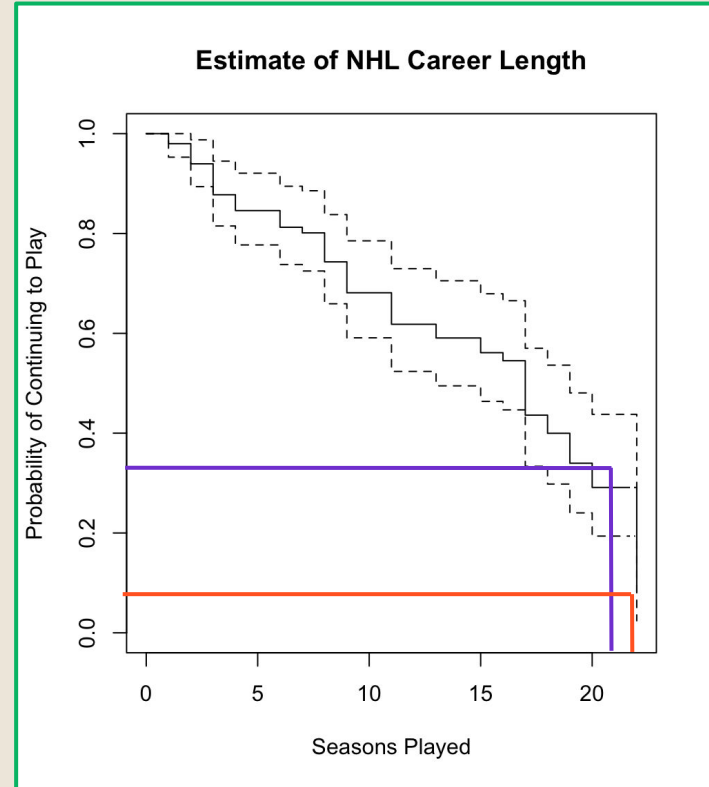
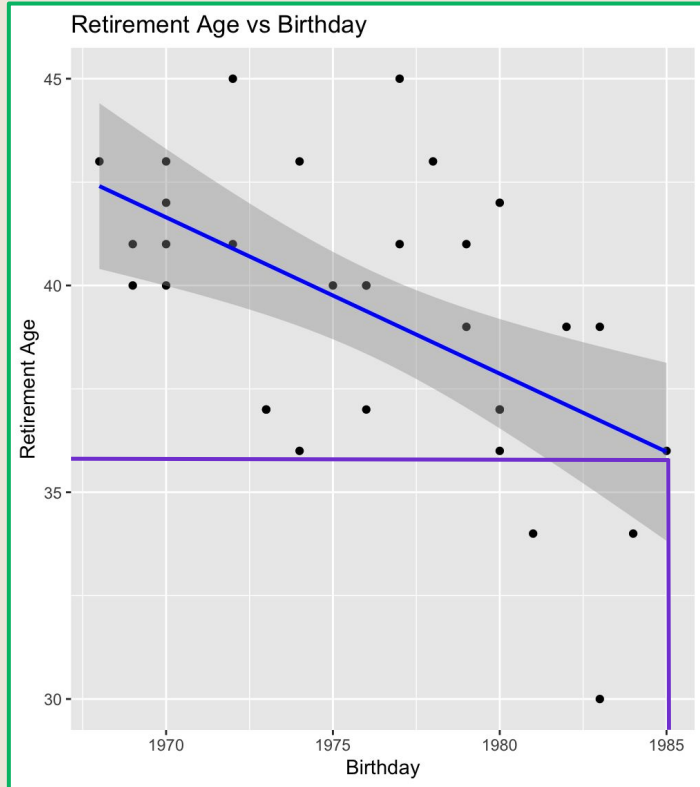
04

COMPARISON TO GRETZKY

What does his pace look like compared to The Great One?

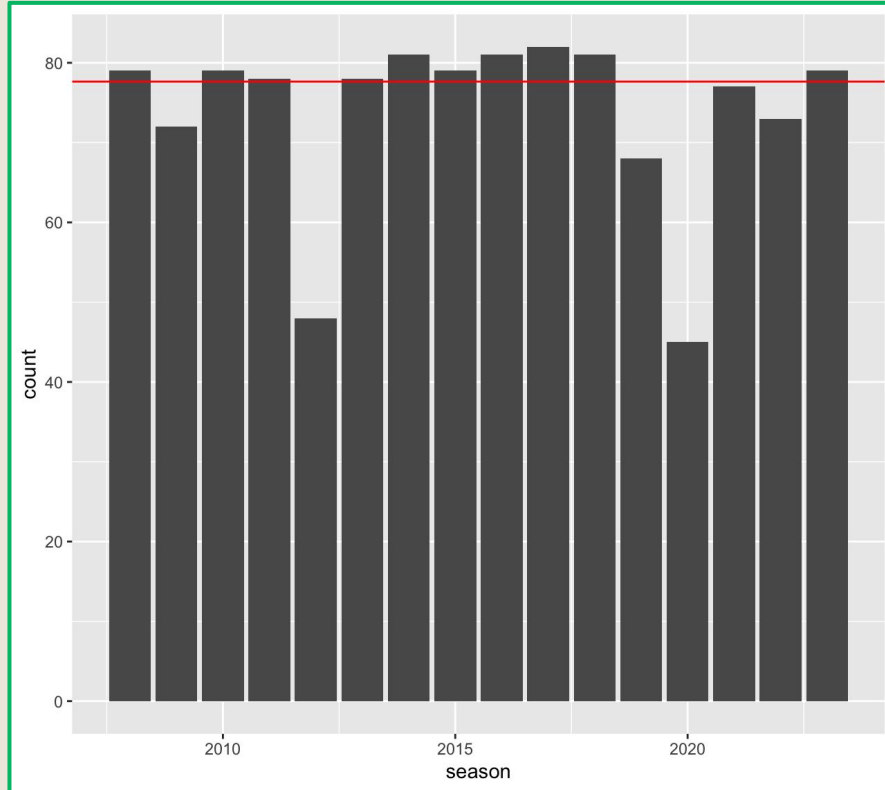


AGE DATA

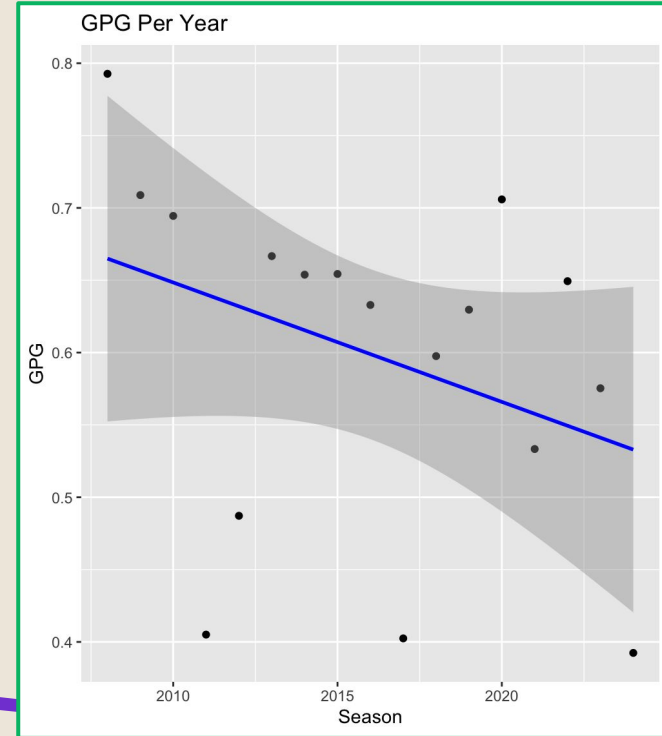
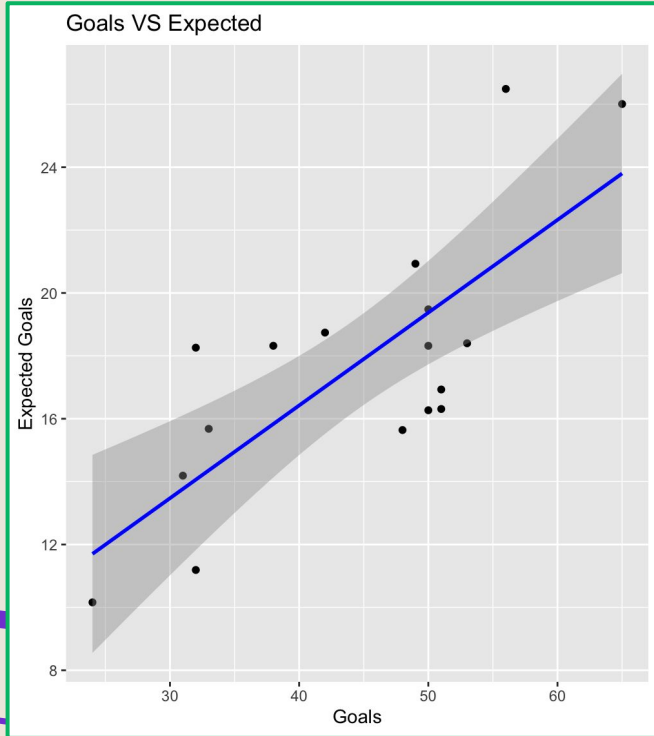


GP PER YEAR

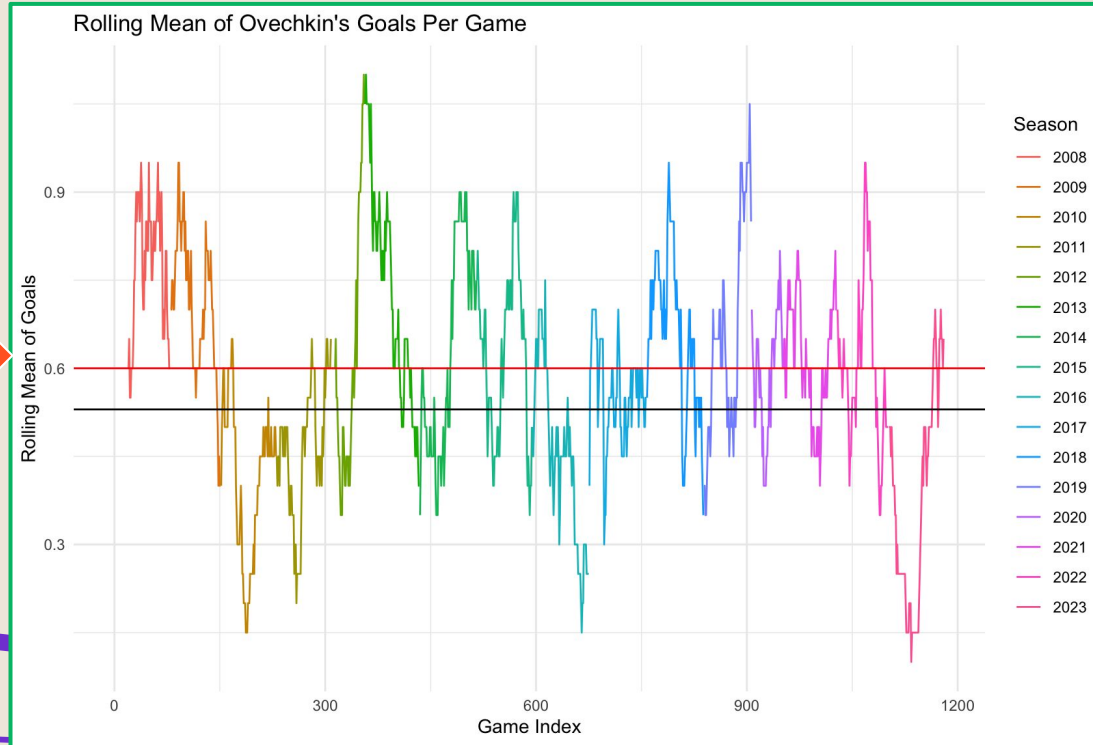
Mean = 77.6



YEARLY SCORING DATA



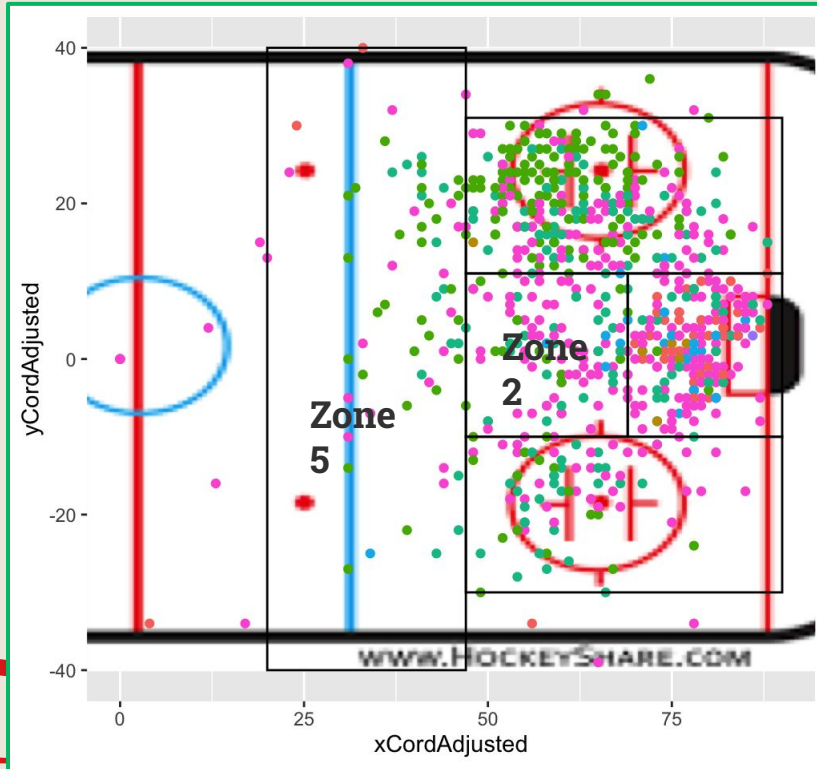
YEARLY SCORING DATA



Career
GPG

The number

LOCATION TRACKING



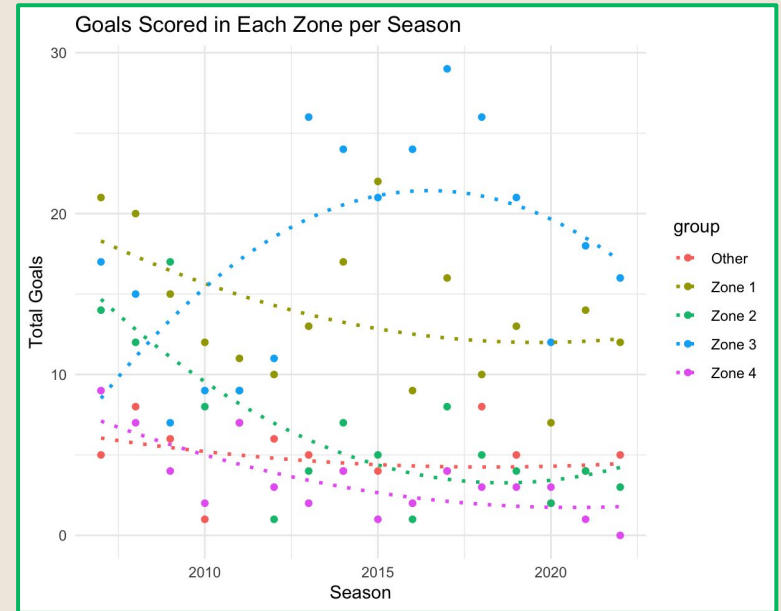
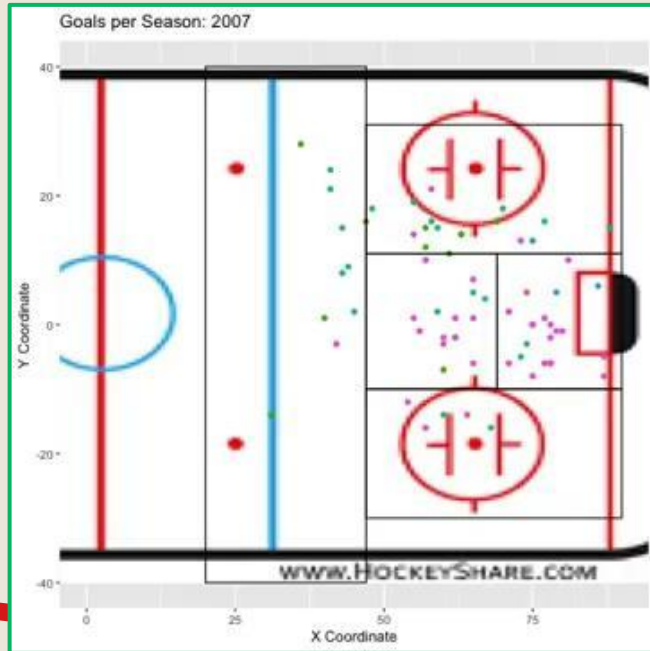
Zone 3

Zone 1

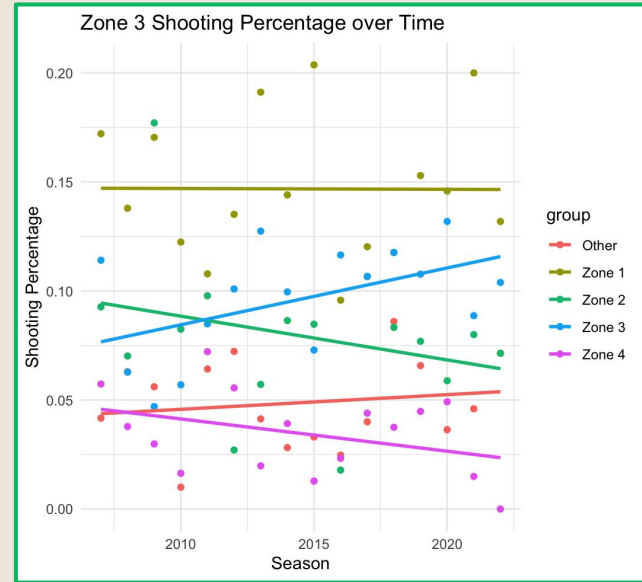
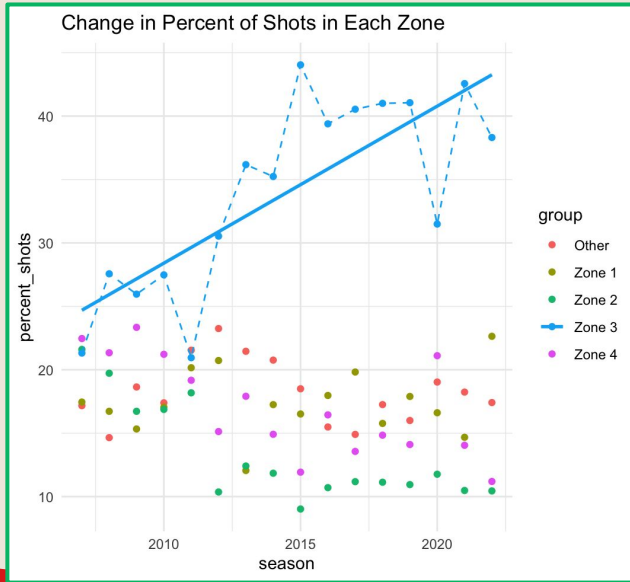
Zone 4



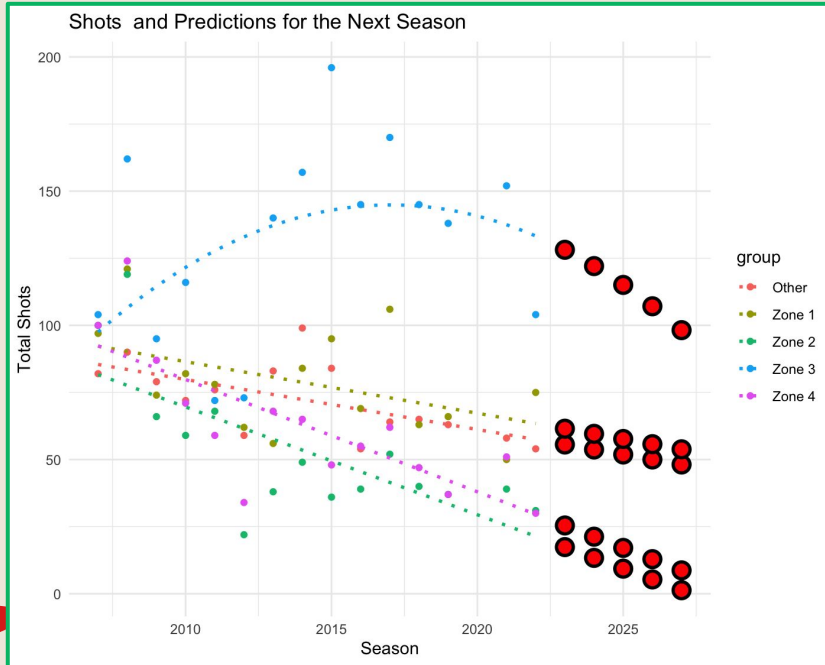
LOCATION TRACKING



LOCATION TRACKING



LOCATION TRACKING



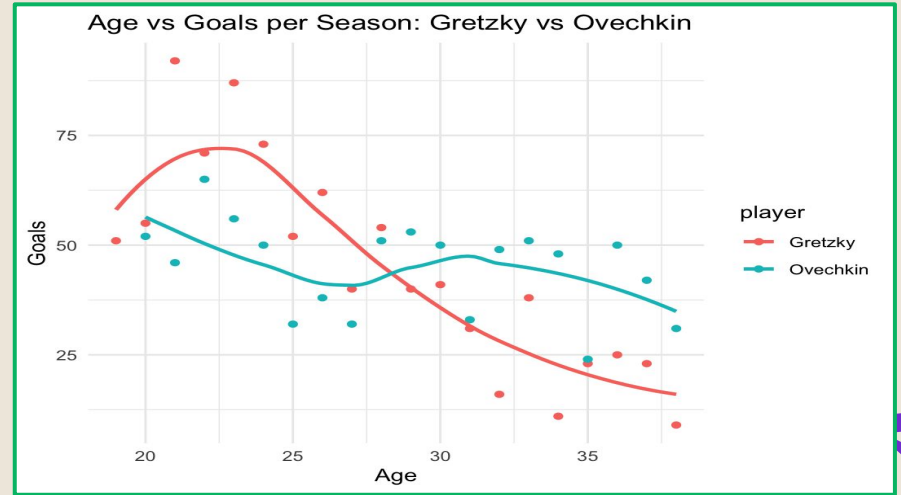
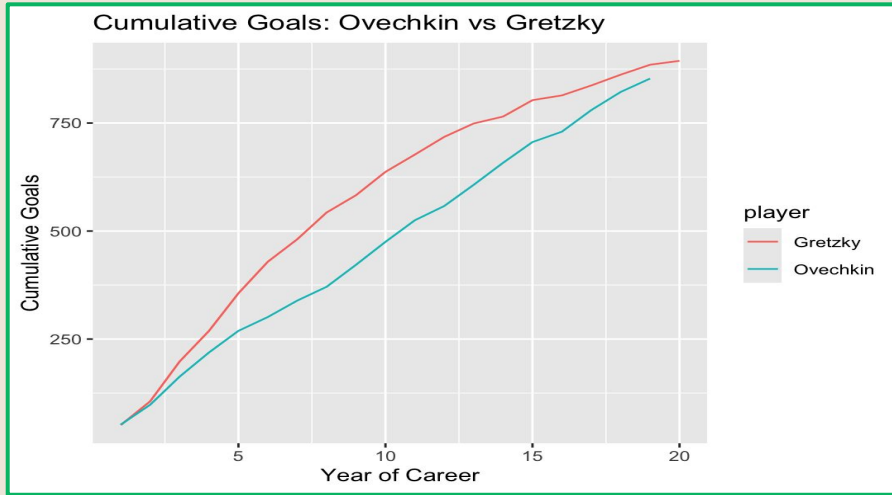
Prediction for next season:
28 Goals



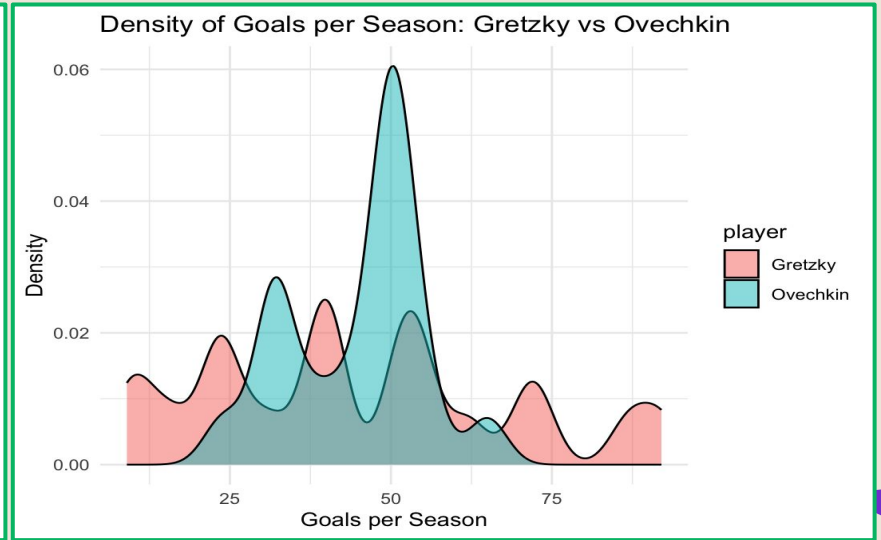
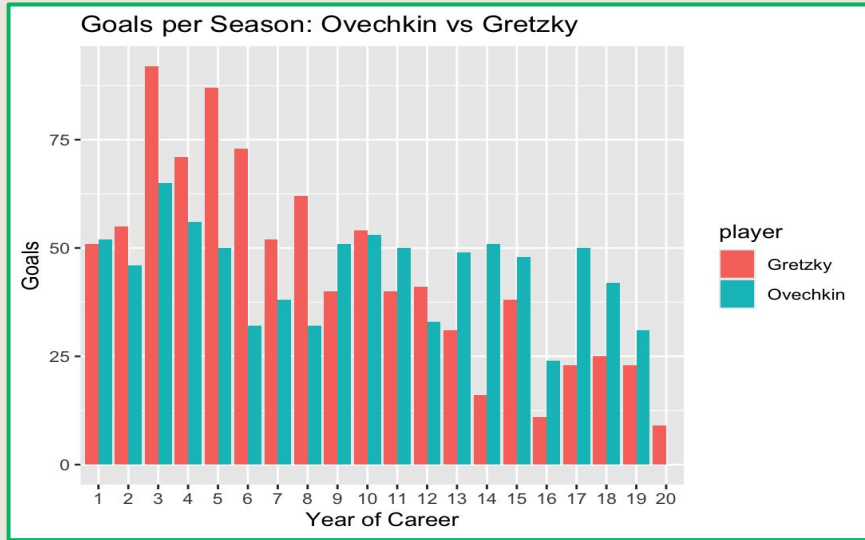
$\text{ZoneShotPrediction} * \text{ZoneShooting\%} = \text{xGoalsinZone}$

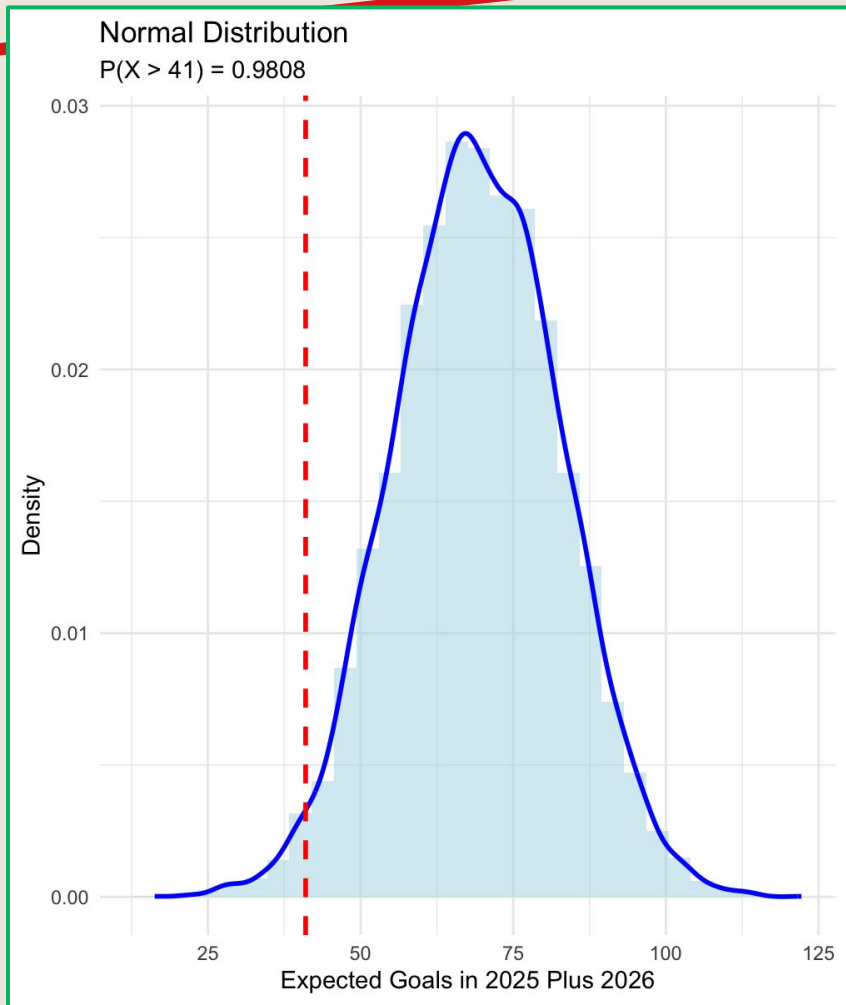
$\text{OverallShotPrediction} * \text{PercentInZonePrediction} * \text{ZoneShooting}$

OVECHKIN VS GRETZKY



OVECHKIN VS GRETZKY





$$P(X > 41) = 0.9808$$

Using the predicted values of goals for 2025 and 2026 from our previous regression model, we created a normal distribution of the two predictions added to calculate the probability that Ovechkin scores more than 41 goals.

We also factored in the probability that there is a shortened season, which given that there have only even been 5 shortened seasons, still predicted a probability of 0.963 that he reaches 41 goals.

CONCLUSIO

No matter what way you look at it, whether you want to say Ovechkin isn't producing as much as he used to, it is entirely probable and very likely that in 2 years or less, we will have a new NHL goal record holder.

