# Sprint Review 3 (Results)

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## **Research Question**

How does AI presents players effectiveness on the soccer/football fields?

## **Objective of this Sprint Review**

- Display our results from the research
- Find a final direction for our sprint reviews

#### **Next Gen Stats: EPA**

EPA is the expected points added by a quarterback per play. This measures a players value on the field for a team.
 4 of the 5 players shown have went on to win MVP for the year.



#### **BEST SEASONS BY TOTAL PASS EPA**

TOTAL EXPECTED POINTS ADDED, SINGLE-SEASON

#### **SINCE 2016**

<b>(</b>	Patrick Mahomes 2018	+195.1
F	Matt Ryan 2016	+184.0
\$	Drew Brees 2018	+150.7
4	Lamar Jackson 2019	+132.9
-	Tom Brady 2017	+132.9

Total Expected Points Added (Total EPA) is derived from the new Next Gen Stats Expected Points model, which measures how each play potentially affects the score of the game relative to the situation.

Total Pass EPA is the net difference between points added and subtracted on pass dropbacks.



#### **Next Gen Stats: Route Recognition**

- Route recognition is a way we can classify routes by the type it is and helps with player-tracking data.
- This stat is mainly targeted for the WR position but also includes the Tight Ends and Runningbacks
- There are 15 type of routes they measure:
  - Wideout routes(10): Screen, flat, slant, crossing, out, in, hitch, corner, post, go
  - Backfield routes(5): Screen, flat, angle, out, wheel

## Route Recognition cont.

7.8%

6.8%

6.2%

4.5%

3.4%

Post

Flat

Slant

Corner

WR screen

Route type	Route pct.	Rank	Target rate	Rank	Air yds/target	Rank
Go	22.3%	1	10.8%	10	23.7	1
Hitch	18.3%	2	20.1%	5	7.7	6
Crossing	11.6%	3	24.8%	4	7.3	7
Out	10.1%	4	27.8%	2	8.3	5
In	8.9%	5	16.9%	7	10.4	4

15%

17.9%

25.2%

14.6%

40.7%

8

6

3

9

2

9

8

3

10

21.3

1.7

6.0

21.0

-2.3

6

7

8

9

10

## Route Recognition cont. (production)

7

8

9

10

Go

Hitch

Flat

WR screen

+0.19

+0.15

+0.07

-0.08

Route type	EPA/target	Rank	Catch rate	Rank	CROE	Rank	
Post	+0.48	1	51.2%	8	+1.9%	2	
Corner	+0.43	2	45%	9	+1.4%	4	
In	+0.31	3	62%	7	-0.8%	8	
Crossing	+0.27	4	69%	4	-0.7%	7	
Slant	+0.26	5	67.4%	5	-2.4%	10	
Out	+0.25	6	67.4%	6	+2.1%	1	

34.1%

69.3%

79.7%

90%

10

3

-2.1%

+1.4%

-0.2%

+1.5%

9

5

6

#### Route Recognition cont. (variation)

Wide Receiver Route Versatility Rankings, 2019 Season (min. 300 routes)



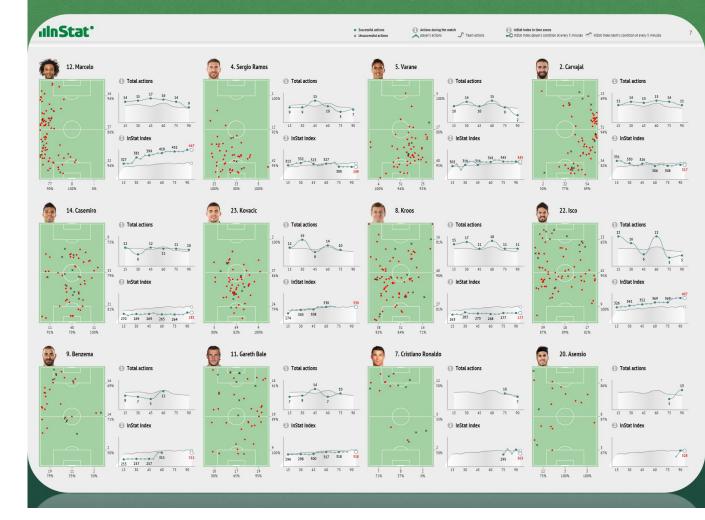
Top 5	Bottom 5
1) Christian Kirk, Cardinals	68) Robert Woods, Rams
2) D.J. Chark, Jaguars	69) Jamison Crowder, Jets
3) Auden Tate, Bengals	70) Allen Robinson, Bears
4) Stefon Diggs, Vikings (now with Bills)	71) Mike Williams, Chargers
5) Golden Tate, Giants	72) Ted Ginn Jr., Saints (now with Bears)

## **Route Recognition**

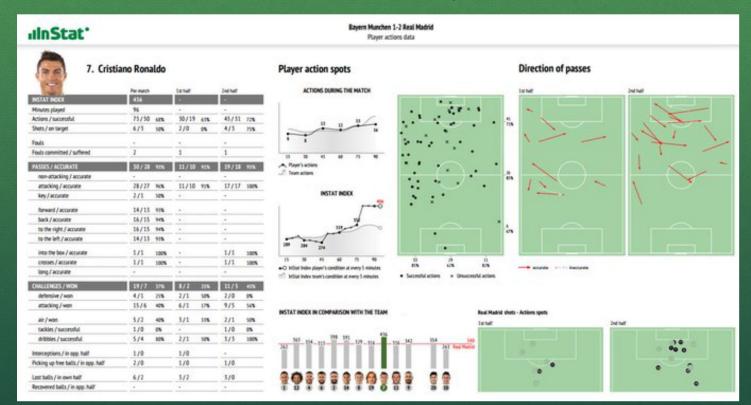
<u>https://www.nfl.com/videos/nick-shook-introduces-route-recognition-to-next-gen-stats</u>

#### Instat

With Instat, soccer players can see how they are performing in games and practice. This data will help them to know if they are being effective on the field.



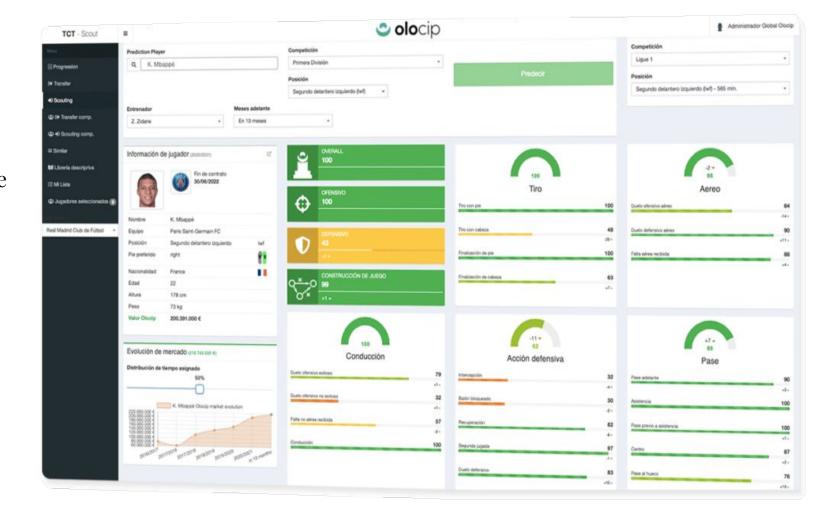
#### Individual player report



https://new.instatscout.com/video/index/kind/Summary/player-id/1365717/match-id/2127030?src=email

#### Olocip

Olocip is a predictive performance analysis platform.







#### What did we achieve?

• We found a research question that best fits us and the easiest to do research on.

## What will we do for the next sprint review?

- Do a little more research and bring all our information together
- Decide whether will we stick with using existing data or create our own
- Create the final product

#### **Work Cited**

• The Next Gen Stats Analytics Team. "Next Gen Stats: New Advanced Metrics You NEED to Know for the 2020 NFL Season." NFL.Com, Mike Band, 19 Nov. 2020,

www.google.com/url?q=https://www.nfl.com/news/next-gen-stats-new-ad vanced-metrics-you-need-to-know-for-the-2020-nfl-season&source=gmail&ust=1636202174429000&usg=AFOjCNEy3roaAtpw4nV9qcBccuWD2BzjCO.