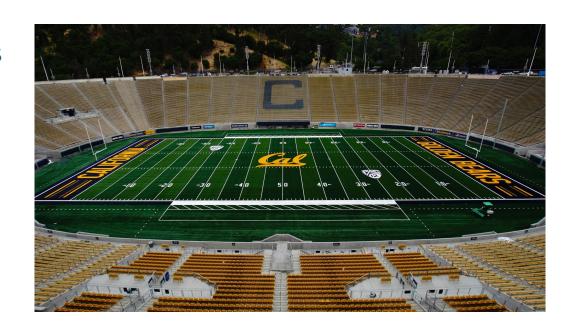
# NFL Play Type Call Sheet

Jeffrey Budiman, Mrinal Chawla, Mickey Hua, Adi Khurana



### **Football**

- Team Sport
- 4 downs to gain 10 yards
- Play types
  - o Running
  - Passing
  - Punting
  - Kicking
- 4 quarters of 15 minutes
- Scoring
  - o 6 points for touchdown
  - 1 extra point
  - o 3 field goal









### **Not Your Traditional Sheet**

#### Traditional:

- Play calls
- Run, Pass game plays
- 3rd down plays
- Personnel types
- Red zone

#### Our Product:

- Play Types
- Score difference
- Down and distance
- Position on field



### **Product Variables**

### Input:

- Offensive/Defensive
- Your Team
- Opposing Team

#### Output (Sheet of Play Types):

- Time Remaining
- Score Difference
- Down and Distance
- Position on Field



## **Market Assessment & Competitors**

Company Name	Product / Solution overview	Who is the primary customer?	Key differentiation vs your proposal			
<u>SportRadar.com</u>	Creates insights based on betting database, player analysis.	Betting professionals, sports enthusiasts & broadcasters.	Our product focuses on creating insights to tune in-game play-calling while this product is focused on generating betting odds & insights.  Sports data focuses on generating betting odds and fantasy insights for professional betting clients while we are focused on enabling coaching staff to better in-game plays.			
SportsData.io	Creates insights based on betting database, player analysis.	Betting professionals & Fantasy sports.				
Draftkings.com/fantasy-foo tball & FanDuel.com	Consumer focus platform to bet on sport and fantasy sports	Betting professionals & Fantasy sports.	Sports data focuses on generating betting odds and fantasy insights for professional betting clients while we are focused on enabling coaching staff to better in-game plays.			
<u>Ably.com</u>	Creating fantasy sport insights & in-game stream	Betting professionals & Fantasy sports.	Sports data focuses on generating betting odds and fantasy insights for professional betting clients while we are focused on enabling coaching staff to better in-game plays.			

#### **Key Insights:**

Most of the key players in the industry are focused on fantasy sports and sports betting. (Clear revenue model)

Insights are leveraged to either *determine odds* or inform clients on data insights to *bet smarter*.

Fantasy sports & Sports analytics are expected to have compound growth cycles and are expected to reach \$6.4B and \$7.2B by 2030 respectively.

Addressable Market Size (Our) - ~300M

Focus - High School & College Coaches

[Action] Reaching out to professional coaches to validate the current product solution & understand pain points.



### **EDA**

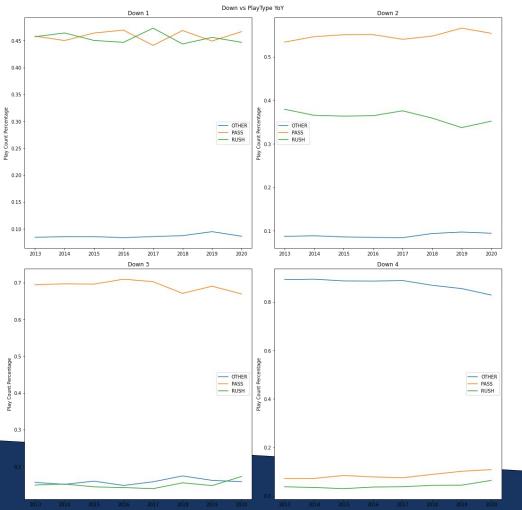
- Selected primary dataset
- Combined with weather data
- Investigated potential output classes
- Missing value investigation
- Trends investigated
  - Situational data relationship with Play calling
  - Play calling trends over time
  - Weather effects
  - Yardage gained

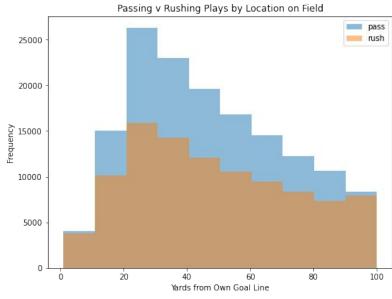
- Impute missing values
  - Weather

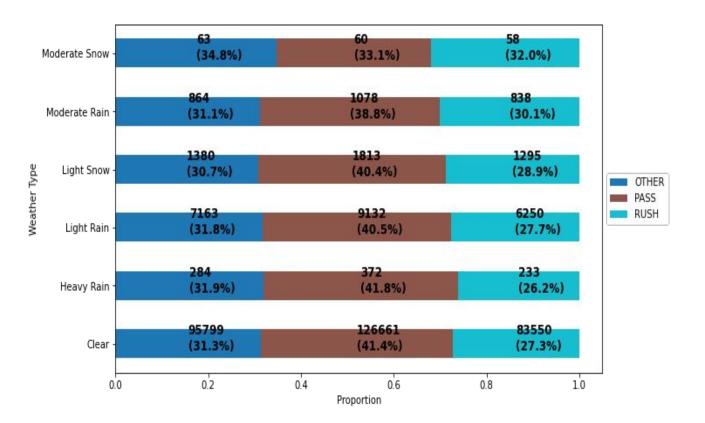
- Clean up based on play type
  - Lots of plays don't make sense as outputs

Select starting set of features











# **Project Planning**

	w5 09/19	w6 09/26	w7 10/03	w8 10/10	w9 10/17	w10 10/24	w11 10/31	br 11/07	w12 11/14	br 11/21	w13	w14 12/05
Assignments	P1				ws	P2					DR	FP
EDA												
cleaning												
analysis												
define predictors												
Model Building												
baseline model												
model tuning												
Infrastructure												
architecture												
implementation												
Product Spec												
baseline												
final												
Web Application												
research		1										
implementation												



Thank you!

**Question?** 

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# **Appendix**

