

# PROJECT CHARTER

## EXPANDING THE NFL BY CHANDLER STEGEN

Project Team members: Chandler Stegen

### PROJECT OBJECTIVE

I want to be able to predict where the NFL should expand its operations, meaning where they should locate their newest franchise. Since the NFL is a business, they will want their new franchise to be located at a place where they can maximize their profits, so in understanding this I wanted to create a model to understand what factors most contribute to NFL teams' profitability. In trying to do this I am creating a linear regression model using variables to help predict the already projected valuation of NFL franchises. I am using the team valuation of NFL franchises because I believe that can be used to help understand how successful an NFL team is in terms of being profitable and successful.

### PROJECT CONTEXT/ BACKGROUND

As an avid fan of football and the NFL I think this link between something I am passionate about and the applicability this type of search has to regular business practices makes this a worthwhile and engaging project for me to partake in. As the NFL is an expanding and growing business who has made large efforts to expand the game such as adding international games, it suggests the interests and willingness of the league to grow in possibly unexpected ways. To take risks while at the time might not seem clear, while in hindsight might turn out to look genius. I believe the NFL and other major sports organizations see the international popularity of a sport like soccer and the success that it brings in terms of international revenues and think why can't that be us? Although this can be a risky endeavor as they must not alienate core fans at home as well as not damage their reputation internationally. So, if the NFL were to choose to expand, they need to do their due diligence to make sure the new location will be successful which should require a plethora of research and analysis which I hope to try and do on a much smaller scale in this project.

### PROJECT REQUIREMENTS

1. Project Charter inc. Objective, Context, Value Statement, Hypothesis and Data Collection plan
2. Curated Data for analysis, assumptions and validation methods utilized
3. Model, output of first runs and improvements made
4. Resulting conclusions about the analysis, insights found and recommended next steps for future

### PROJECT ASSUMPTIONS AND/OR CONSTRAINTS

[Highlight any assumptions you are making about the data or models utilized, any constraints you know exist or encountered during the project.]

#### Assumptions:

- Team Valuations are a good indicator of success(profit maximizing) ability of NFL franchises
- NFL Teams will expand operations as a means to maximize profit immediately whereas that might not be the case
  - They might simply want to expand brand recognition
- Linear regression model the best way to go about understanding the data
  - Should try other models to see what fits best
- I was unable to see the model projected graphically so since my Model with all the variables is "best" potential chance for overfitting

#### Constraints

- Unable to access all information related to Team Valuations
  - Team Assets:
    - Stadium, Offices, Facilities etc.
- Unable to fully understand specific variables I want to test for
  - How does one quantify branding?
- Not all information "up to date" of time when making project
  - Don't have 2022 revenues)
  - Branding data from 2021
  - Population Data 2020
  - Not being up to date means not being able to account for potentially changing factors and their importance to the data

## HYPOTHESIS STATEMENTS

[Write the hypothesis statements that will be tested with your models. If attempting to disprove a null hypothesis include both the hypothesis and the alternate hypothesis statements.]

Null Hypothesis: There are no factors that contribute to understanding NFL team valuations

Alternate Hypothesis: Market Size, Stadium Revenue, and Branding are the most important factors that lead to understanding NFL team valuations.

## DATA COLLECTION METHOD

[Describe the data you will be leveraging for the analysis and the method in which you will be using it. Eg. (Sales data from the V\$ corporation 2010-2022 via csv file download.)]

Estimated US population data for 2020 via csv file download

NFL stadium attendance data from 2021-2022 season via csv file download

NFL stadium data(Cost to build, Capacity) updated for 2021-2022 season via csv file download

NFL team on field performance data updated after completion of 2021-2022 season via csv file download

NFL branding analytics research from 2021 via csv file download

NFL team financial operations(Revenues, Operating Income, Team Valuations) from 2021 via csv file download

- a. <https://datasetsearch.research.google.com/> - misc
- b. <https://www.kaggle.com/> -misc
- c. <https://data.world/> -misc
- d. <https://data.gov/> -government
- e. <https://datahub.io/collections> -mostly business and finance
- f. <https://data.cityofchicago.org/> - chicago specific