

# FRISBEE DATA DYNAMICS

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# BUSINESS PROBLEM AND OBJECTIVE



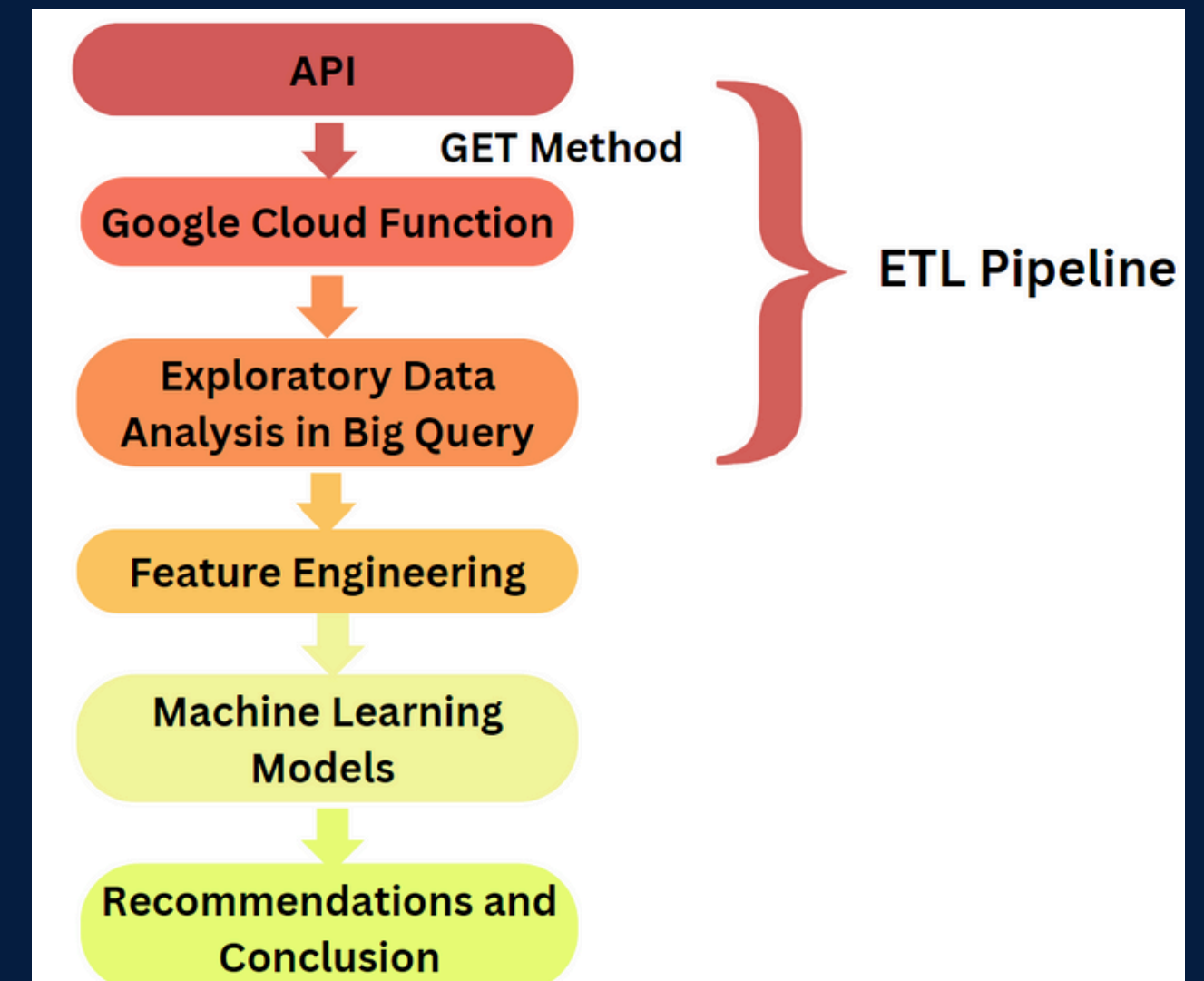
Currently, Boston Glory does not sufficiently utilize the vast amount of data available to make strategic decisions.

The primary objective is to enhance the performance of the Boston Glory frisbee team by leveraging data analytics to provide actionable insights.

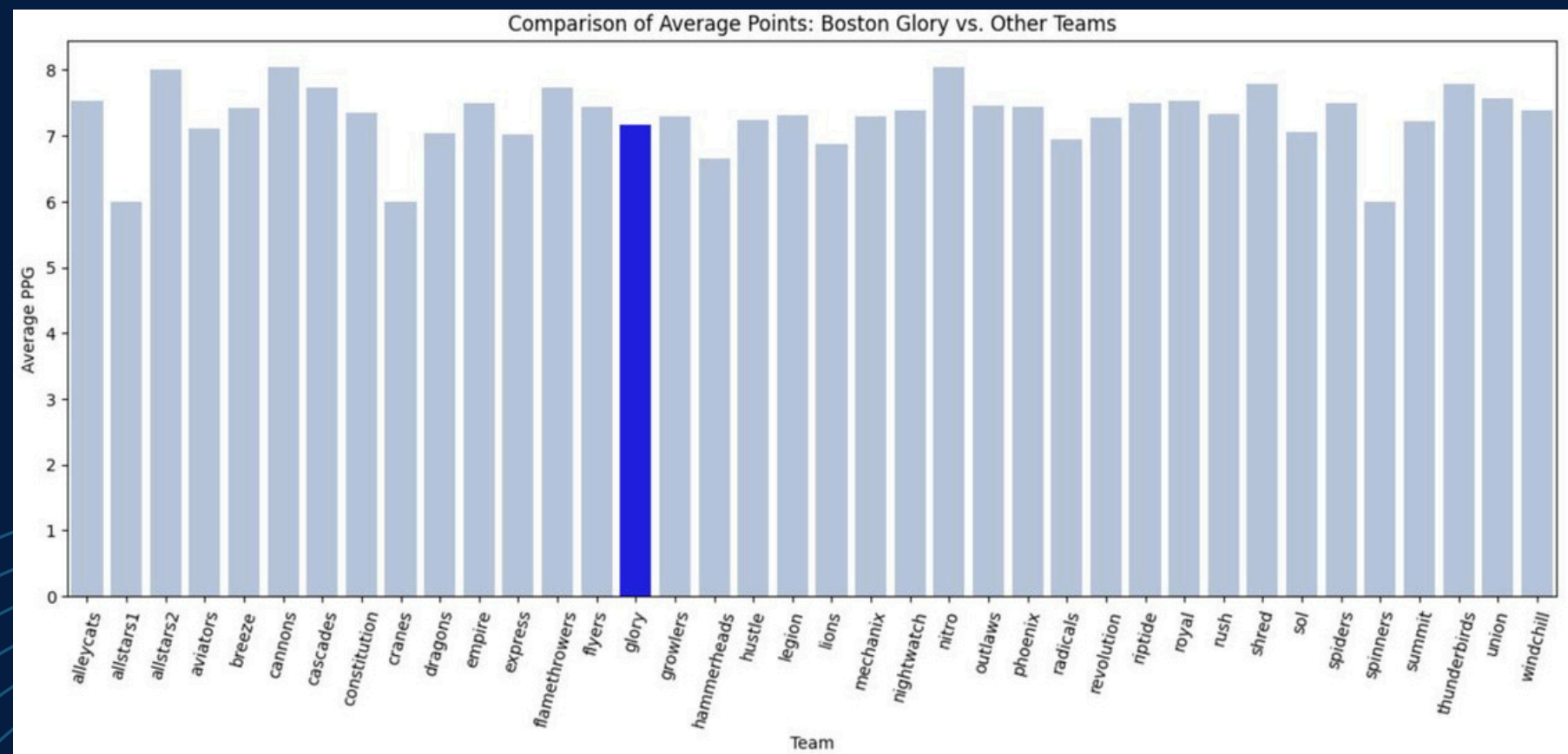
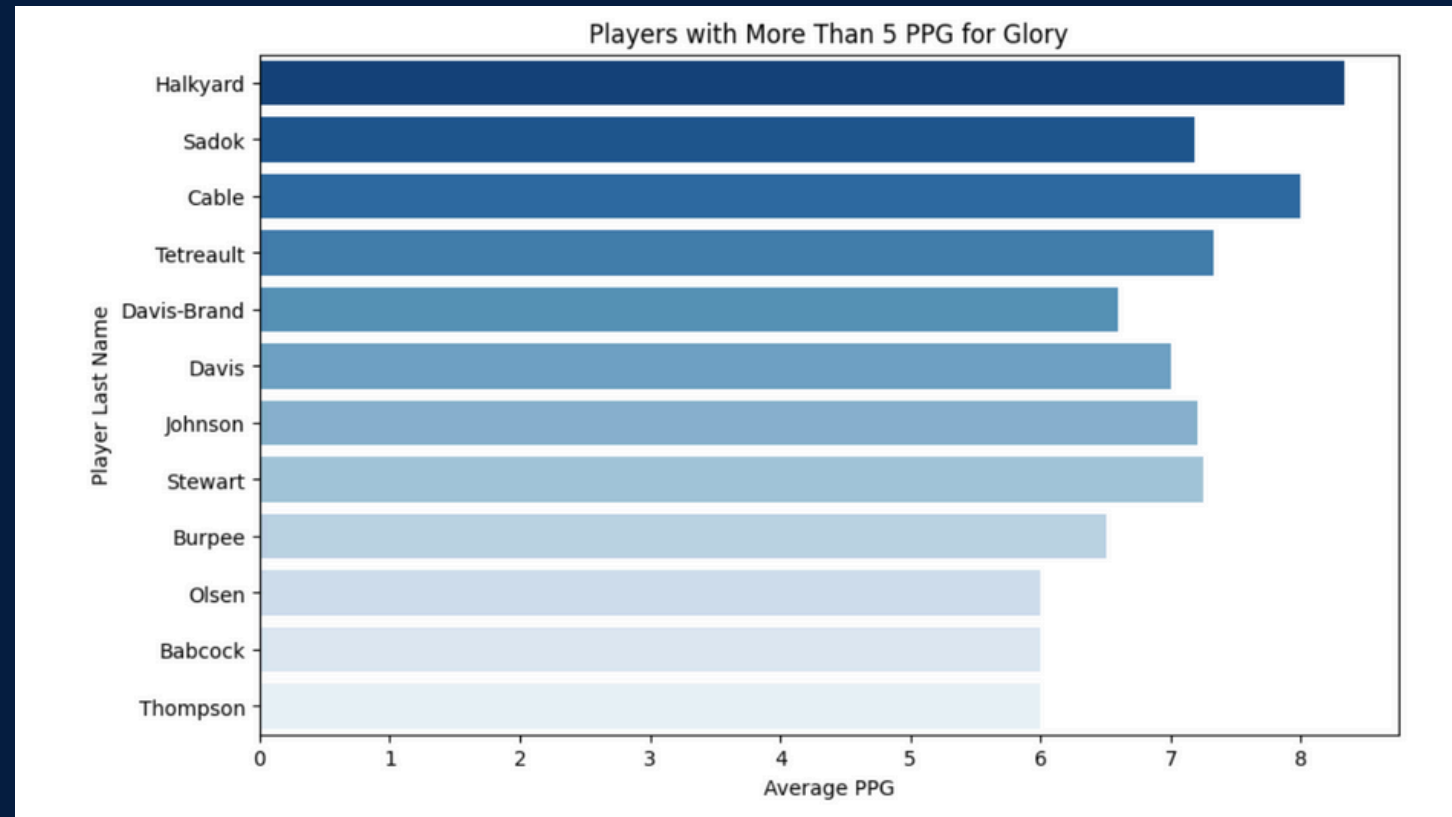
The focus is on identifying key areas of offensive and defensive strengths and weaknesses and suggesting on-field strategies that can lead to wins and championships within the UFA league.

# DATA COLLECTION, METHODOLOGY & PROCESSING

- We source our data from the UFA API which has play-by-play data from all games and teams from 2019 through the 2024 seasons
- We build a low cost, easily managed ETL infrastructure(Google Cloud Function) to automate cleaning and ingestion of the data from these sources into our Data Warehouse Google BigQuery
- We also used Cloud Schedulers for event triggers weekly to update data, dashboards and models which will help the team the real time insights



# ADDRESSING THE NEED FOR OFFENSIVE IMPROVEMENT



- Boston Glory is scoring **7.27** PPG compared to league average of **7.43** PPG
- Top two offensive players scoring approximately **8.0** PPG
- How can we score more points?
  - Increase **yardage**
  - Reduce **turnover** rate
  - Strategize cohesive offensive **lineup**
  - Score **goals**

POINT= GOAL + ASSIST





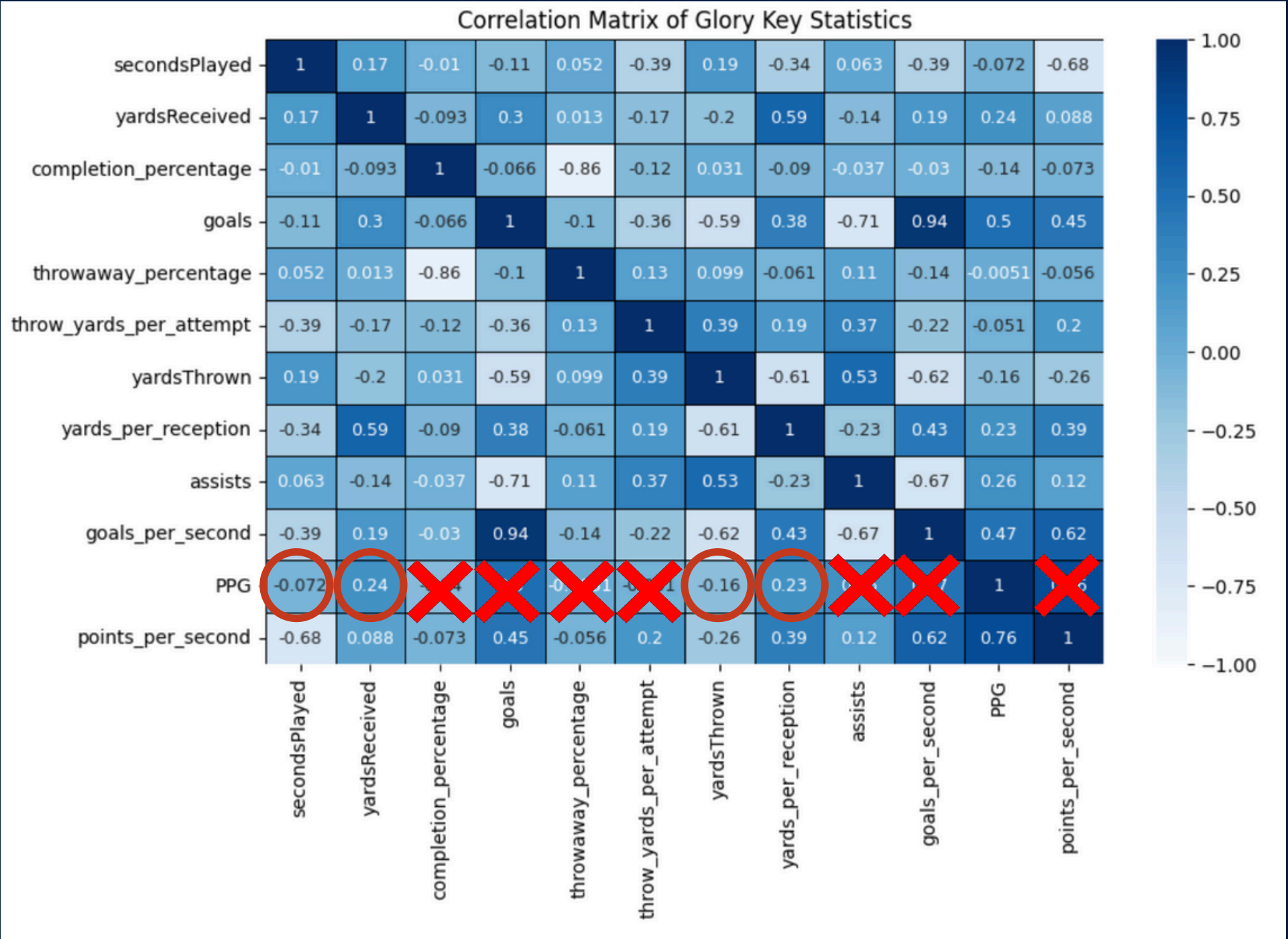
# METRICS ASSOCIATED WITH GOAL SCORING

## POSITIVE PPG CORRELATION

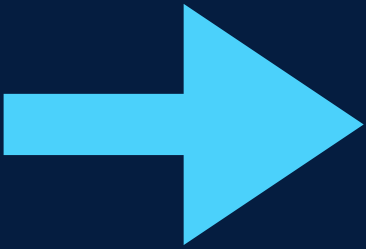
- YARDS RECEIVED: The total number of vertical yards received by the player for the season
- YARDS PER RECEPTION: divide a player's total receiving yards by the number of receptions they've made
- ~~GOALS, ASSISTS, GOALS PER SECOND, POINTS PER SECOND~~

## NEGATIVE PPG CORRELATION

- SECONDS PLAYED: The number of seconds on the field by the player
- YARDS THROWN: The total number of vertical yards thrown by the player for the season
- ~~COMPLETION PERCENTAGE, THROWAWAY PERCENTAGE, THROW AWAY YARDS PER ATTEMPT~~



These metrics could improve Boston Glory's offensive performance.



YARDS RECEIVED  
YARDS PER RECEPTION  
SECONDS PLAYED  
YARDS THROWN



# FUTURE PROPOSED WORK

01

- We will be implementing supervised machine learning method (Linear Regression) for predicting Points per Game (Goals + Assists) using dependent variables such as 'Yard Received', 'Yard per Reception', 'Seconds Played', 'Yards Thrown

02

- Deliver multiple models and strategies to the Boston Glory front office and present the real time dashboards

03

- Provide actionable on-field strategy recommendations based on the model outcomes.
- Iterate and refine models based on feedback and additional data

