

Gaming

Machine learning implementation for Game Balancing to enhance user experience

Weekly gamer churn drop by 8 points



Industry
Gaming



Function
Match Making



- Data Used
1. Player Skills
 2. Player Attributes
 3. Player's historical data
 4. Game settings
 5. Latency, Waiting time



- Tech Stack
1. Python
 2. Microsoft SQL Server

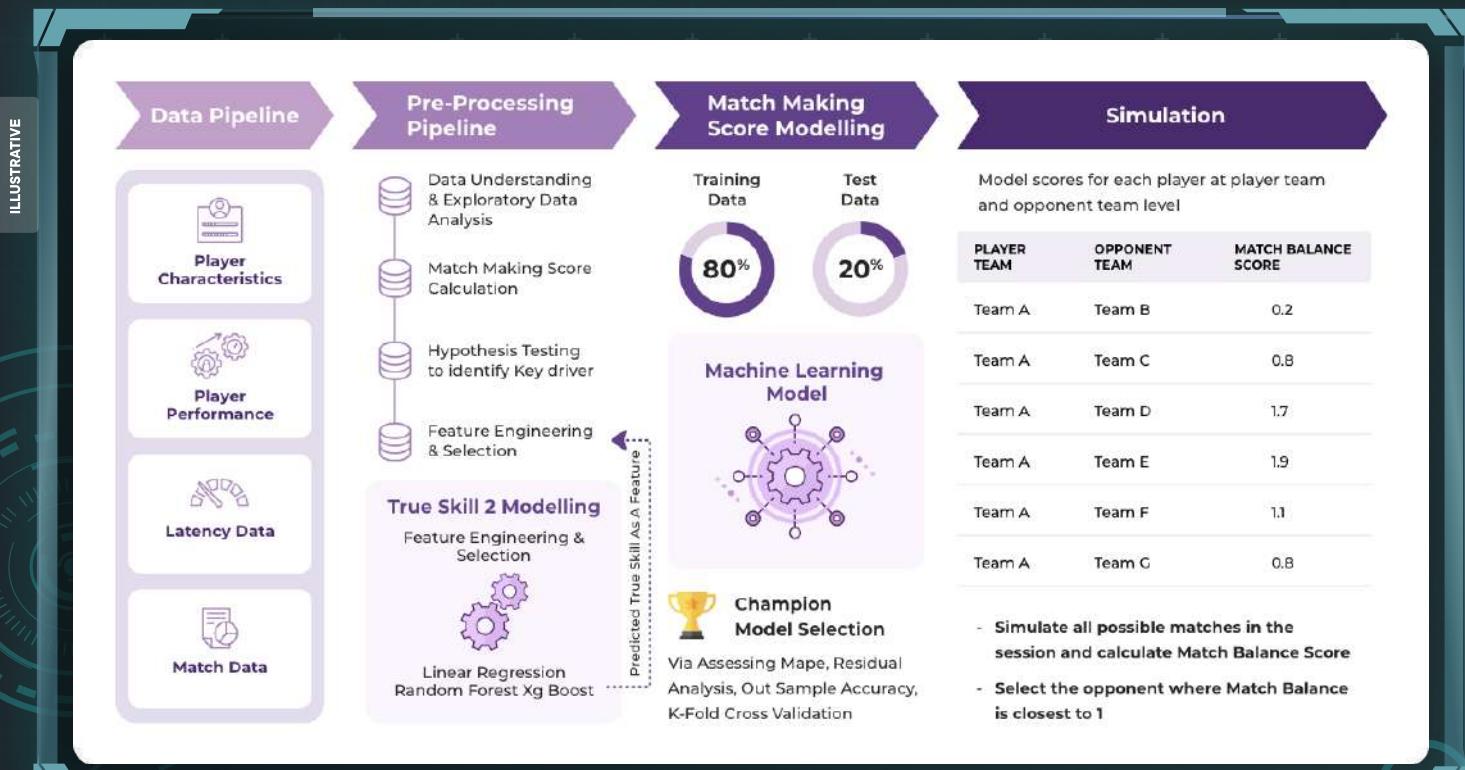
Who Is The Client?

The client was one of the top Publishers of a famous AAA Game based in the US. Their dominance in the gaming space has a thriving impact in the industry with the highest-grossing and critically acclaimed game titles across the world.



Solution Approach

The motivation for matchmaking is all about proffering players a rewarding experience that signifies the right amount of challenge or thrust into teams with a dynamic that ensembles their ability. With this approach, Affine's Decision Science experts developed an intelligent Machine Learning framework using factors other than traditional skill metrics like player characteristics, preference, customizations, network factors to identify the best match opponent for game balancing.

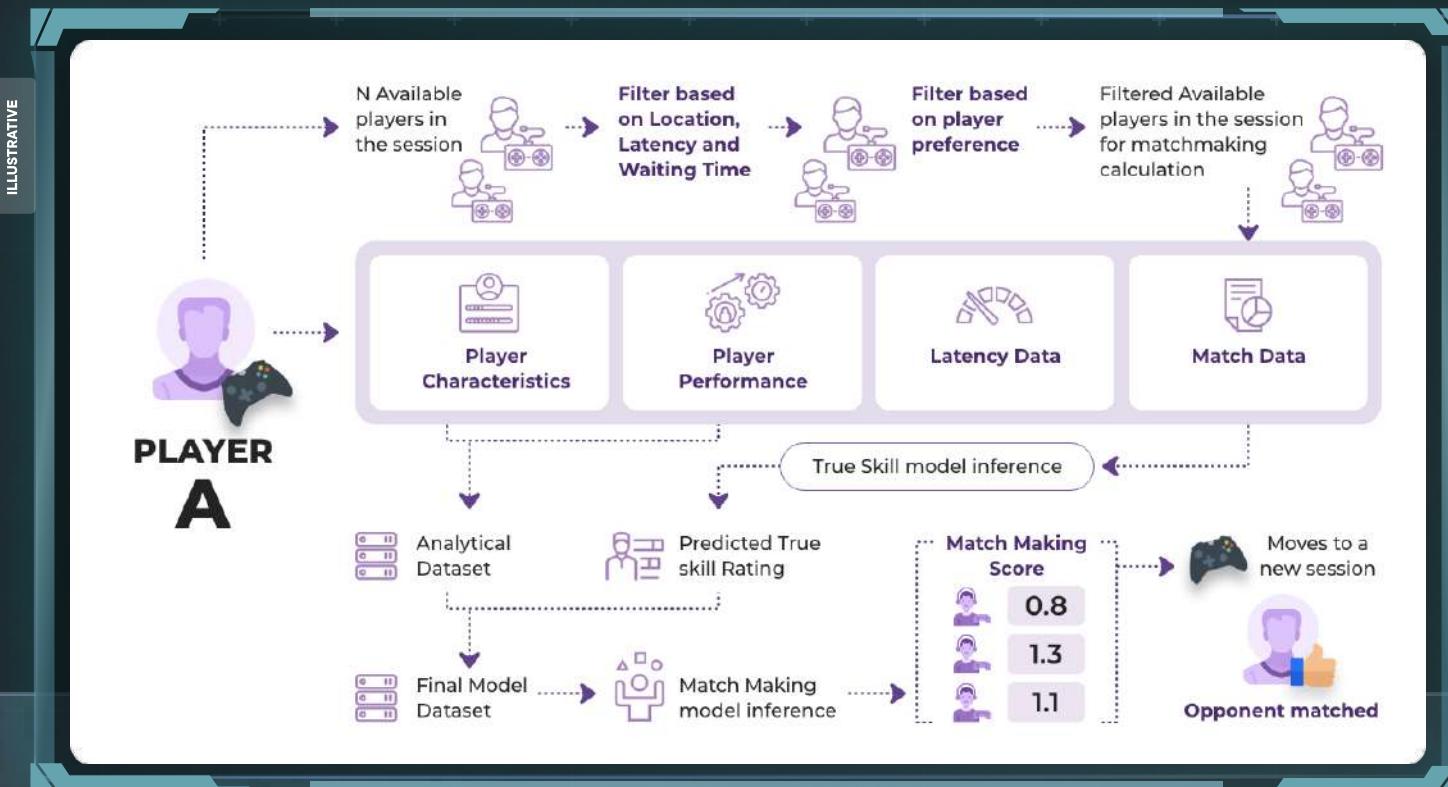


Business Quandary

For all multiplayer games, matchmaking is an essential factor in the gameplay adventure and, poor matchmaking can lead to pessimistic gaming experiences resulting in gamer churn. The client wanted Affine to optimize game balance in online multiplayer games using a modern Machine Learning based Matchmaking system to reduce User Drop Rates and control the overall Churn to improve the online gaming experience.

The Pay Off

Robust and refined matchmaking isn't limited to the gaming experience. It equally matters to game Studios and Publishers because it directly impacts commercial and critical success. Affine has successfully developed Machine Learning powered Matchmaking system using various data sets such as player skills, player attributes, player's historical data, game settings, latency, and waiting time. As a result, the model gives the best match opponent for a given player or a team in real-time to improve the gaming experience.



Business Benefits

10 - 12% ↑

Average Game Session Duration

8 POINTS ↓

Weekly Player Churn

10 - 12% ↑

Revenue