

Starcraft 2

Executive Summary

➤ Overview:

The project aims to explore the business case for Esports teams to profit from high skill players in Starcraft 2, a Real-Time Strategy game. The business goal is to find players that excel at the game and our model is built to predict such high performing players. This will in turn lead to higher chances of winning tournaments, gaining sponsorships and more. Overall, our model will benefit Esports teams who are looking to win championships in the Starcraft 2 tournament.

➤ Business Case:

The business case is to find high performing (League Index Rank - 7 and 8) Starcraft 2 players to benefit an Esports organization such as TSM or 100 Thieves. The business situation enables these organizations to scout and recruit high skill Starcraft 2 players, making the probability or chance to win championships stronger. This will catapult the recruited player into limelight, drawing in sponsors, such as Red bull, Honda, and more. Furthermore, the Esports team will gain more recognition; in turn increasing their brand value and effectively expanding their fan-base. This will lead to higher sales of their merchandise such as jerseys and increasing sales too. With this, our model will predict the best Starcraft 2 player amongst the available pool of players. It will in effect increase the probability of winning championships for the Esports teams and bringing in additional value in terms of sales.

➤ Model Overview:

Upon thorough analysis of the dataset, the best model found was a Neural Network which was a 2 layered, 3 node Gaussian network at a cut-off of 0.4. Its accuracy of 1s measure is at **86%**, model sensitivity is at **70%** and overall accuracy is at **98.4%**. Although the model's complexity is high, this model has the highest accuracy of 1s in comparison to most of the models. Of the 27 target class players, it predicts 18 players accurately.

➤ Recommendations:

The data-driven recommendations suggest focusing on recruiting players with a higher probability of winning championships. By focusing on recruiting these players, organizations can decrease the time and resources they spend on players with lower chances of winning. Furthermore, they can provide targeted training and development opportunities to players who have been identified as high potential players. The model's insights can further help with other aspects of talent management such as player retention, team management, etc. .

"The work contained and presented here is our work and our work alone."