Dota 2: what should I pick?

Data Mining
Clustering and Association Analysis
732A61

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June 8, 2017

Introduction

Electronics sports, which will from now on be referred to as esports, are a form of competition using electronic systems, in particular video games, controlled by human players. In recent years the revenue and audience have seen a rapid growth with an estimation of over 300 million viewers in 2016 and over $450 million in global revenue, and it is expected to see a formidable growth in the near future.[1]
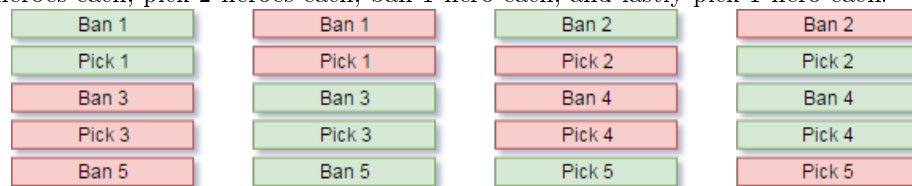
The esports industry utilizes many different platforms such as personal computers, x-box, playstation, and since everything is electronic we could potentially utilize all that data that is being generated for various kinds of analyses. That could help organizations/teams find better strategies, improve the viewer experience, and help newcomers getting accustomed the different games in a short time span.

DotA 2

Defense of the Ancients (DotA 2) is a so called multiplayer online battle arena (MOBA) video game developed by Vale Corporation made first available in 2011. The game plays out as two teams of 5 player against each other where every player controls a hero, a character with unique abilities. The aim is to destroy the opponents ancient and thus win the game. The game is played in two phases, picks/bans and actual gameplay, and in this report the focus is on picks/bans that is very tactical because heroes have their strength and weaknesses. As of June 8, 2017there are 114 unique heroes.

Picks/Bans

The picks/bans phase is where the two teams pick their heroes that will be played during the gameplay phase. Each team has to pick 5 heroes, ban 5 heroes, and no team can pick banned heroes. To simplify the way this works, it starts out with both team banning 2 heroes each, then pick 2 heroes each, ban 2 heroes each, pick 2 heroes each, ban 1 hero each, and lastly pick 1 hero each.

Ban 1	Ban 1	Ban 2	Ban 2
Pick 1	Pick 1	Pick 2	Pick 2
Ban 3	Ban 3	Ban 4	Ban 4
Pick 3	Pick 3	Pick 4	Pick 4
Ban 5	Ban 5	Pick 5	Pick 5

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[1] https://newzoo.com/insights/articles/esports-revenues-will-reach-696-million-in-2017/