

Application to game analytics to improve the gameplay, revenue and/ or the retention of a game



Abstract

The purpose of the project is to analyse and compare game retention between similar games so as to allow us to understand how and why these games are so widely played and enjoyed around the world. The games that we have chosen are League of Legends (LoL) and Defence Of The Ancients (DoTA). We would have to research about how the developers implement and use the game mechanics to keep players engaged, attract more players and to improve their own revenue of the game. We also find out on the opinion of the players of both games through a questionnaire that we have created.

Introduction

Game analytics can be defined as "a sub-branch of business intelligence, applied to game development. Every aspect of a game contributes to the overall feel, attractiveness and player experience of the game. They are the driving force of how the game would turn out, whether good or bad. These can include large aspects such as gameplay and control, or smaller ones such as the music and aesthetics of the game. The games League of Legend (LoL) and Defence Of The Ancients (DoTA) are chosen as they are very similar in gameplay, being in the Multiplayer Online Battle Arena (MOBA) genre. They also are both very popular, each having massive player bases. We have researched on how the developers have created the game to allow for a better player experience and how have they made the game more attractive for more people to play. We have hypothesized that players are more likely to be more addicted to a game with the influence of their friends rather than the mechanics of the game. Our hypothesis can be proven through what we have researched through on the Internet, and linking it to the results of the questionnaire.

Methodology

Google Drive

We have made use of the sharing feature so that we are able to edit the slides and documents simultaneously and easily.

Questionnaires

We have used questionnaires as a method to be able to obtain data based on the opinions of actual gamers. Our questionnaires have been crafted and created with accordance to our hypothesis and to effectively prove or disprove our hypothesis. We gave the questionnaire to numerous people from different places through the Internet to be able to get a more reliable result due to a larger sample size.

Researching on the Internet

We have also increased our sample size and data from one of the largest banks of information, the Internet. The Internet is one of the best place to get any information, given that one has the patience to dig deep, as well as being able to sieve through the information effectively to judge its reliability and accuracy. Furthermore, due to the nature of the games that we are researching, it would be difficult to obtain information about games through books. Finally, to prove our hypothesis, we have to look at the players' opinions of the game. This information is crucial for us to come up with the conclusion of whether gameplay elements or peer pressure are the ones that affect the addiction of the player.

Open-ended Questions

For question one, most of the answers that we have collected reflect that the players start playing both games as their friends were playing the game and wanting to be in the circle. A few isolated responses were that they were enticed by the advertisements online and played with strangers at the start. For question two, most of the LoL players said that the simplicity, soundtrack and the linear learning curve of the game have enabled them to enjoy the game to the fullest while the DoTA2 players said that its quality of the graphics and sounds and the variety of mechanics have made the game to be enjoyable for them. For question three, most players have played both games for about three years, with DoTA 2 having lesser play time amongst its players as it was released later than LoL, in July 9th 2013 compared to LoL being released on October 27, 2009. For question four, most replies were that the multiplayer experience with their friends kept them playing, with the gameplay experience also being a factor in the retention of players.

Conclusion

Overall, the rating of League of Legend(LoL) is higher than that of DoTA2. From the data collected, the number of LoL players who have friends playing with them is higher than that of DoTA2. The rating for the cash items in LoL is also higher than that of DoTA2, most likely because the cash items in LoL is cheaper than that of DoTA2. The rating of the accessibility of LoL is also higher than DoTA2. Also, the learning curve of LoL is much linear than that of DoTA2. However, the graphic quality and soundtrack quality of DoTA2 is better than LoL. The players in DoTA2 relies more on mechanics while players in LoL relies more on teamworks. In conclusion, LoL attracts player by being player friendly in term that it have a lower learning curve and higher accessibility and DoTA2 attracts players with its high quality graphic and soundtrack. Our hypothesis hence only proves correct for LoL than DoTA.

Results

Ranging for questions; 1-poor 2-fair 3-good 4-excellent

How would you rate the game overall?

Rating	LoL	DoTA 2
1	4	2
2	2	11
3	34	20
4	20	27

Is the cost of the using real money on in-game items worth it for you to continue playing?

Rating	LoL	DoTA 2
1	1	15
2	39	31
3	17	15
4	3	1

Rate the game play element which is of greater importance
-Game mechanics or the multiplayer

	LoL	DoTA 2
Game mechanics	21	29
Multiplayer	39	31

How many friends do you have playing along-side you?

Rating	LoL	DoTA 2
0-5	2	8
5-10	9	17
10-15	13	18
>15	36	17

Ratings of accessibility of the game

Rating	LoL	DoTA 2
1	4	13
2	11	6
3	41	37
4	4	4



A science student explaining their questionnaire.

Discussion

We discussed about the hypothesis which is having a friend's influence would tend to have a greater impact on the addiction levels of a gamer as compared to gameplay elements. By choosing games of the same genre, being LoL and DoTA2, the results would be far more reliable, as the factor of having differing gameplay is hence less impactful. From the questionnaire, there is a greater number of players rating DoTA2 as an excellent game as compared to LoL. Majority of the players feel that both games are fairly accessible, with accessibility being defined in our case as getting into the game, learning to play the game and increasing the skill level of the player. From the open ended we found out that most players started playing because of peer pressure. LoL allows players to enjoy the game by making the game simple and easy to learn while DoTA2 hone its quality of the graphics and sounds and also made the game to be played based on mechanics to improve the gamers' experience. Lastly for the player retention part, we found out that most player keeps playing because of peer pressure and minor players continue playing for the game quality.

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