

Growth of Online Gaming with Data Analytics

Introduction

Video Gaming has evolved from the days of PAC-MAN and arcades. The world of computer games is now a powerful and profitable business (Teradata, 2017). Games have started to become more and more complex in terms of design. Player economy ecosystems need to be maintained, and we no longer create games from a fire-and-forget point of view (Solarwinds Loggly, 2016). Big Data has already made its way into every single aspect of the gaming industry. Whether it's collecting data from the users, targeted marketing, better user experience, or even customer focus, Big Data has got you covered. Analytics is not about trend analysis anymore, it is driving the product development for gaming companies. In this paper we will focus on the common use cases of data analytics in the gaming industry.

Why Data Science ?

We Live in a data driven world. Data analytics is no longer limited to Artificial Intelligence or Decision Support Systems. It has already entered this \$138 billion global market with 2.3 billion gamers around the world.

Acknowledgements

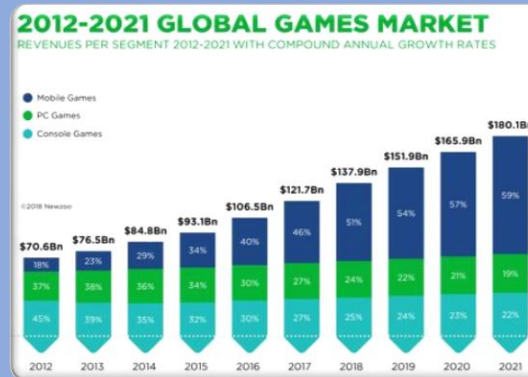
Thank you to our instructors of DSC 500 at Bellevue University for allowing us to explore such an interesting topic. The lessons we have learned are invaluable and will most definitely apply to our professional and personal lives.

Deliverable

How has the gaming industry transformed over the years into this giant \$40 billion market ? How does the big players in the gaming industry use data analytics to their advantage ? Why do big players like Microsoft acquire gaming companies ? How does massive online multiplayer games use big data to improve the gaming experience ? Can AI bots play against humans in complex strategy games ? What is player lifecycle and how can we leverage that ?

We will discuss all of these in detail in this paper.

- Game Development
- Monetization
- Game Design
- Object Identification
- Graphics & Visual effects
- Personalized Marketing
- Fraud Detection



Conclusions

We can conclude data science is important in the development of video games. Data science helps developers create better AI for the games being produced. Smarter and more intuitive AI creates a better experience for the user because of the increased unpredictability in the game. Data science is very important to game monetization because this is ultimately where the company's profit lies. It is important to know who your top players are and collect data on their preferences to improve your game. Data science in games is only going to become better over the years creating more profits and better user experiences.

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