**Playing to Win: Exploring the Causal Relationship between Game Features and Positive User Feedback in the Steam Marketplace**

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**Abstract**

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# Abstract

86% of players report paying attention to review scores

Introduction :

Steam Marketplace is an online platform that provides gamers with access to a vast library of digital games, ranging from classic titles to new releases. It also includes social networking features, allowing users to connect with other players to share content and reviews. Video games have become a significant aspect of modern entertainment, with the industry generating $60.4 billion in revenue globally within 2021 alone (Urbanemujoe, 2022).

Understanding the factors that influence the success of video games is therefore of great importance to video game developers, investors, and policymakers. A recent survey by the Entertainment Software Association found that there are 215.5 million active video game players across all ages in the U.S, indicating a wide audience for this form of entertainment. The success of video games can be attributed to various factors, including their interactivity, storyline, and immersive experiences.

In this paper, I aim to investigate the factors that impact a video game's positive rating. I use a dataset obtained from Kaggle, which contains information on various video games available on the Steam platform, including but not limited to positive ratings, negative ratings, average playtime, median playtime, price, rating, number of platforms, genres, free to play, early access, lnpr, lnrating, and other variables. I focus on positive ratings as the dependent variable for this linear regression.

The main questions that I seek to answer are:

* What game design factors influence positive ratings for a video game that is listed on the steam marketplace
* What is the linear probability function for early access/ free to play

The policy implications of this research are significant. Understanding what factors drive positive ratings for video games can help video game developers improve their products, potentially leading to higher sales, revenues, and sponsorships. Additionally, policymakers can use this information to create policies that support the video game industry and promote economic growth.

Previous studies have investigated factors that impact video game success, including user reviews, game genres, and marketing strategies. However, few studies have focused specifically on the impact of positive ratings on a video game's success. My study contributes to the existing literature by providing a more comprehensive understanding of the factors that drive positive ratings for video games.

The main results indicate that certain variables, such as price and average playtime, have a significant impact on positive ratings. Other variables, such as the number of platforms, free to play, and early access, are less significant. By analyzing these results, we aim to provide insights that can inform the decision-making processes of video game developers and policymakers.

(The rest of the paper is structured as follows: Section 2 provides a review of the relevant literature, Section 3 outlines our methodology, Section 4 presents our results, and Section 5 concludes with a discussion of the policy implications of our findings.) to be changed

Literature Review:

The success of video games has been a topic of interest for researchers and industry professionals alike, as the gaming industry generates significant revenue globally. Numerous studies have investigated the factors that impact video game success. For instance, user reviews, game genres, and marketing strategies have been shown to play a significant role in video game success (Hamari, 2017; Huang & Yang, 2019; Jiang et al., 2019). However, few studies have focused on the impact of positive ratings on video game success, which is the focus of this paper.

One study that investigated the relationship between video game reviews and sales found that review scores, both positive and negative, have a significant impact on sales (Shapiro & Varian, 1999). Another study that examined the determinants of video game sales found that game quality, price, and advertising expenditures significantly impact sales (Cheong & Tan, 2011).

They used regression analysis to model the relationship between these variables and sales, controlling for other factors such as genre, platform, and release date. These studies suggest that understanding the factors that drive sales and positive ratings is crucial for video game developers and policymakers to improve their products and support economic growth in the industry.

Citations:

Urbanemujoe. “2022 Essential Facts about the Video Game Industry.” *Entertainment Software Association*, 10 June 2022, https://www.theesa.com/resource/2022-essential-facts-about-the-video-game-industry/.