

Team:Manipogo

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Topic: Video Games

Dataset : Video Games Sales

Video Games

“An electronic game that involves interaction with a user interface to generate visual feedback on a video device such as a TV screen or computer monitor.”

The video games space is a 70-year old industry that has rapidly reached across the entire globe with its influence. Video games have evolved over time to incorporate new and advancing technology. Now, incorporated with the internet, they connect people in their homes from all over the world. The video games industry has swelled to reach over 2.5 billion gamers around the world and took in \$131 billion in 2018, with projections of \$300 billion by 2025. Video games have engaged a massive, growing audience so we have decided as a team to try and gain insight into the trends in the sales of video game titles over time.

Companies spend millions of dollars and thousands of hours of work on some games but it doesn't always generate enough revenue to even pay off these expenses. If the company is not big enough, they might even go bankrupt after an unsuccessful game release. One of the biggest indications of the revenue generated by the games is the number of sales.

We will be investigating sales of video games within regions across the world. Through regression analysis, we will specifically be looking at the different regions(response variable) which made a large impact on sales and the analysis to show a comparison between the different regions. Exploring regional sales as well as the global sales might

also help deciding if the company should spend extra resources on region specific parts such as translations and marketing. We hope to delve and explore the different explanatory variables such as critic ratings and user ratings to show our analysis to support our prediction.

To be able to explore the number of sales a game gets, we will use the data we found on <https://www.kaggle.com/kendallgillies/video-game-sales-and-ratings>. This dataset contains video games that were released between 1976 and 2017 which sold more than 100,000 copies. The author of this dataset created it mostly using VGChartz and Metacritic. It has 7112 observations and 15 variables. The original data had 17,417 observations, but since not all of the listed video games have information on Metacritic's website we removed the rows with missing values. We have also removed the ratings variable due to the lack of number of ratings for video games that had relevant sales because the rating system had not existed then.

Using the Video Games Sales data we hope to identify trends and predict the sales in different regions as well as overall sales globally. We have decided to split the data into different rows to show individual predictions of the sales in the different regions such as NA, EU, JP, OTHER SALES, GLOBAL SALES.

We believe that some games will sell more than others in different regions because some cultures might prefer some genres over others or some platforms are sold more in one region. We believe people also tend to buy more from local publishers/developers. Because of this reason each member of our group will take one region.

Richard Lee	NA
Deannia Lucas	Global Sales
Caglar Cinar	JP
Hershel Don	Other
Hima Spandana Barla	EU

Individually, we will use the same explanatory variables to analyze our data within our respected regions. The variables consist of critic ratings, user ratings, critic score, user score, year of release, and platform. We hope that these variables will provide sufficient data in our study in order to show a relevant analysis on video game sales.

New video games reach billions of customers every year. We believe that this regional and global analysis of video game sales may reveal trends of interest. We will specifically be looking at the volume and score of user and critic ratings as predictive variables for sales. There may be differences among the regions as well as trends by genre. There may also be regional differences between critic and user preferences. We hope that we will yield interesting and useful information for those looking to invest in or make an effort to develop a video game.

Sources:

<https://newzoo.com/insights/articles/the-global-games-market-will-generate-152-1-billion-in-2019-as-the-u-s-overtakes-china-as-the-biggest-market/>

<https://variety.com/2019/gaming/news/video-games-300-billion-industry-2025-report-1203202672/>