The source I chose to analyze contained information regarding the sale of video games between 1982 and 2012, which included the game’s title, genre, publisher, platform that it was developed for, review score, and number of units sold in North America, Europe, Japan, and in total globally. As a consumer who has been buying and playing video games for the past 20 years, I thought that it might be interesting to see if I could identify trends and influencing factors within the data in order to create compelling visualizations. Given my decades of familiarity with this market, I was able to supplement my past experiences with research on the subject and draw conclusions that theorize the cause of certain trends within the video game industry at a given point in time.

Visualizing the dataset in several ways made information apparent that would otherwise be difficult to find. For instance, given data containing the years of game releases and the reviews that each game received, visualizing the lowest and highest reviews for each game could likely prove to be informational and potentially indicate factors of a particular game’s success or failure. In the form of a bar chart that also displayed the difference between scores, the data revealed that Tony Hawk’s Pro Skater had the largest review difference of any game with a 32%. In order to determine why reviews were so significantly different, I conducted research and found a potential reason for the vastly different scores. The game was released in 2000 by Nintendo for the GameBoy Color and Nintendo 64, which are handheld and home video game consoles respectively. Given how underpowered and simple handheld game consoles were then in comparison to home game consoles, things like graphics, gameplay, and product quality were ultimately affected by the limitations of the device. In fact, a review of the handheld version corroborates this, saying “The Game Boy Color certainly wasn’t advanced enough to have large 3D spaces or recognizable licensed music, so plenty of concessions would have to be made to bring it to the handheld.” (TheGameHoard, 2000) Furthermore, the reviewer admits that the developers for the GameBoy Color version were “at a disadvantage compared to their console game counterparts” (TheGameHoard, 2000) In comparison, the Nintendo 64 version was given significantly higher praise, likely due to the system’s capabilities. This version was reviewed as “an outstanding game and an excellent port of the PlayStation original, and it's a worthy addition to anyone's collection.” (Gerstmann, 2000) I believe that the significant contrast between reviews is due to how the game was adapted differently for each console with one version surpassing the other, a conclusion I was easily able to come to through visualizing the data and researching the game in question.

Using a stacked bar chart to display the genre preferences of gamers in North America, Europe, and Japan, I was also able to easily determine what genre was the most popular in each country. According to the visualization, 28% of games sold in Japan showed that gamers preferred role-playing games, or RPGS, to any other genre. Aside from the japanese role-playing games like Pokemon that became wildly popular around the world, one of the main reasons for its popularity in gaming is due to the fact that “Japan has a long, proud history of role-playing games, such as the “Dragon Quest” or the “Final Fantasy” games. The country’s past RPG successes continue to perpetuate the cycle.” (Ashcraft, 2012) In other words, the country’s gaming history is accurately represented in the data. As for North America and Europe, 14.8% and 16.4% of the populations’ game sales showed that gamers strongly favored sports games more than any other genre respectively. The preference for the sports genre is likely explicable due to the importance of organized sports within the cultures of the countries that both continents contain. For instance, the popularity of football and baseball in the United States of America as well as the popularity of soccer for most European countries like Italy, Germany, Spain, and England. It was surprising to learn that shooters were not the most preferred genre in North America, given how frequently the games are played in the United States. However, the data showed only a .9% difference between the two genres, making it the second-most popular genre.

Challenges in visualizing the data came quickly as I found myself unable to visualize certain data in the way that I required. For example, certain measures and dimensions would not format correctly until I assigned them roles related to time or location. Once I learned to take advantage of the more advanced tools, the visualizations began to take shape and I was able to display the information in a readable format. Many of the key findings from the data did not surprise me, mainly those that came from the graphs that reported the success and number of units sold by companies like Nintendo. Given the company’s history and reputation when it comes to marketing, product development, affordability, and its commitment to its longtime customers, I wasn’t shocked to learn that they had the highest number of global sales by platform and developed the highest-rated game in the dataset. The Nintendo Gameboy was my very first gaming console, so I wanted to develop a number of visualizations with a concentration on the company that introduced me to the hobby I’ve had for nearly 20 years. Because Nintendo produces more family-friendly products rather than graphic and mature content, I was interested in finding how the company’s values affected their sales and the quality of their products compared to their competitors Sony and Microsoft. Through visualizing the data, I found very few instances in which Nintendo sacrificed success for the maintaining of their values. Working with this dataset taught me to think critically and forced me to analyze an industry that I’ve been a patron of for the majority of my life. Overall, I’m proud to have identified and visualized trends within simple words and numbers, a skill that I’d like to pursue further in the coming years.

**Works Cited**

Ashcraft, B. (2012, May 02) “Japan’s Gamers Are Starting To Shoot ‘Em Up.” *JapanTimes.* Retrieved from: https://www.japantimes.co.jp/life/2012/05/02/digital/japans-gamers-are-starting-to-shoot-em-up/

Bramwell, A. (2020) *Video Game Sales* [Data set] https://data.world/bramwax/video-games-sales/workspace/file?filename=Video+Games+Sales.xlsx

Gerstmann, J. (2000, April 28) “Tony Hawk’s Pro Skater Review.” *GameSpot.* Retrieved from: <https://www.gamespot.com/reviews/tony-hawks-pro-skater-review/1900-2545312/>

jumpropeman (2021, May 30) “Tony Hawk’s Pro Skater (GBC).” *TheGameHoard.* Retrieved from: https://thegamehoard.com/2021/05/30/tony-hawks-pro-skater-gbc/